## Prediction and predicament

*Historicity, the state and socio-economic planning in the Netherlands, 1917–1999*

Kayzel, T.N.

**Publication date**
2021
**Document Version**
Final published version

# Prediction and Predicament

## Historicity, the State and Socio-Economic Planning in the Netherlands, 1917–1999

## Thomas Kayzel
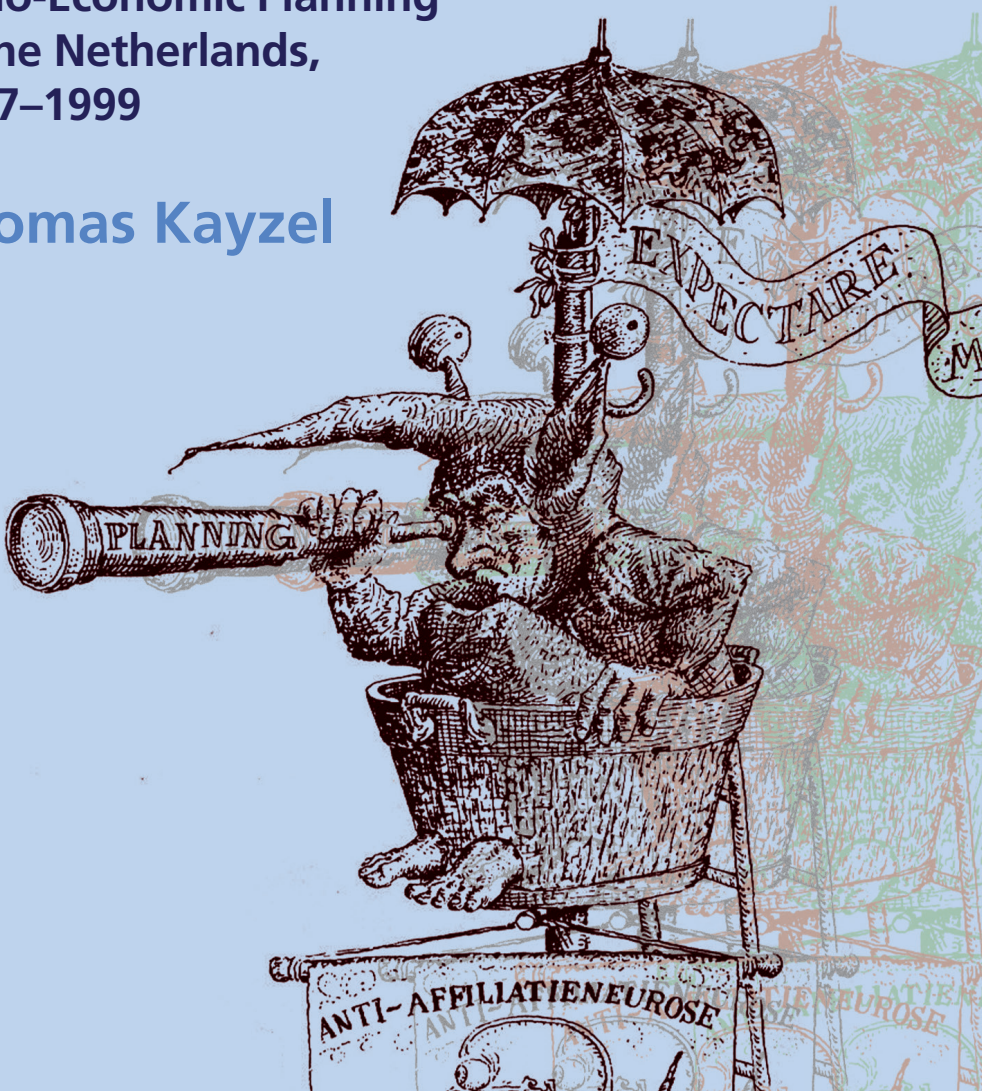
# Prediction
# and
# Predicament

Thomas Kayzel

# Prediction and Predicament
## Historicity, the State and Socio-Economic Planning in the Netherlands, 1917–1999

## ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam op
gezag van de Rector Magnificus
prof. dr. ir. K.I.J. Maex
ten overstaan van een door het College voor Promoties ingestelde commissie,
in het openbaar te verdedigen in de Agnietenkapel
op dinsdag 16 november 2021, te 12.00 uur

door Thomas Nicolaas Kayzel
geboren te Amsterdam

**Promotiecommissie**

*Promotor:*       *prof. dr. H.O. Dijstelbloem*      *Universiteit van Amsterdam*

*Copromotor:*     *dr. F. Russo*                     *Universiteit van Amsterdam*

*Overige leden:*  *prof. dr. E. Peeren*             *Universiteit van Amsterdam*
                  *prof. E.S. Schliesser*           *Universiteit van Amsterdam*
                  *prof. dr. W. Schinkel*           *Erasmus Universiteit Rotterdam*
                  *prof. dr. J. Andersson*          *Uppsala  Universitet*
                  *dr. J. Bos*                      *Universiteit van Amsterdam*

Faculteit der Geesteswetenschappen

NIXON:
Like the Ming Tombs. I think this leap
Forward to light is the first step
Of all our youth, all nations' youth;
Our duty is to show them both
Their future and our past, the fire
And the noon glare. How they inspire
Our poor dry bones, put us in mind
Of our forgotten dreams! We send
Children on our crusades, we bring
Children our countries, right or wrong.
Then we retire. Father and sons,
Let us join hands, make peace for once
History is our mother, we
Best do her honor in this way.

MAO:
History is a dirty sow:
If we by chance escape her maw
She overlies us.


— John Adams, *Nixon in China*, Act I, Scene 2 (1987),
libretto by Alice Goodman.

# Table of Contents

## *Table of Figures*

## List of Abbreviations

| | |
|---|---|
| CPB | Centraal Planbureau (Central Planning Bureau) |
| R-I | Representing and Intervening |
| KVP | Katholieke Volkspartij (Catholic People's Party) |
| MIPPA | Model voor Integratie Partiële Plannings Activiteiten (Model for Integration of Partial Planning Activities) |
| NL-HaNA | Nationale Arcief in Den Haag (Dutch National Archives) |
| NMP | Nationaal Milieubeleidsplan (National Environmental Policy Plan) |
| RAND | Research and Development Corporation |
| RIVM | Rijksinstituut voor Volksgezondheid en Milieu (National Agency for Public Health and Environment) |
| SDAP | Sociaal Democratische Arbeiderspartij (Social Democratic Workers Party) |
| VROM | Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieu (Ministry of Public Housing, Spatial Planning, and Environment) |
| VVD | Volkspartij voor Vrijheid en Democratie (People's Party for Freedom and Democracy) |
| WRR | Wetenschappelijke Raad voor Regeringsbeleid (Scientific Council for Government Policy) |

# *Acknowledgements*

When Jelle Bruineberg showed me around the office at the philosophy department at the Oude Turfmark, the place where I was about to conduct most of the work on this thesis, he pointed to all the bureaus, recounting the fates of the previous PhDs who had worked there. One of these previous officemates had been virtually invisible. Only the empty coffee cups, which he did not return to the pantry but hid in the archive cabinets—gathering impressive layers of mould and producing quite a stench overtime—were a silent witness of his presence. One night, when Jelle wanted to pick up some papers he had accidentally left at his office table, he found him obsessively watching live reports of the 24-hour newsreel of the annexation of Crimea. Jelle told the story to underline his main advice for a starting PhD candidate: the key to finishing was self-care. For Jelle, this self-care mainly existed in buying lots of chocolates without feeling any guilt. For me, the fate of my predecessor—whose former desk I now occupied—was a warning: don't get too caught up in the trials and tribulations of your PhD research. Now that the ordeal is finished—and the result lies before the reader's very eyes—I can safely conclude: whatever the merit or quality of this thesis, I have not lost my mind in CNN's 24-hour newsreel (even with the endless CONVID coverage and the storming of Capitol Hill). A result that I can at least be a little proud of.

Like any other, my thesis also had its challenges and difficulties—although it must be emphasized that during the five years it took me to complete it, I worked with great pleasure and enthusiasm almost to the very end. I have always felt privileged to have had the freedom and resources to pursue my own research interests. One such challenge that might interest the reader

was that the final result is quite different from the initial plan. Originally intended as a Science and Technology Studies-inspired analysis of the scientific expertise of the Central Planning Bureau with a focus on the philosophy of modelling, after two years of work I found myself drifting off to the history social-economic planning in the Netherlands and the conceptual change of the idea of the future. As a result, for quite some time while working on the PhD, I was not sure whether I would identify as a philosopher or historian nor whether the research I was working on could be characterised as either a philosophical or historical or both. The identity crisis felt alienating (as I was seemingly unable to explain to philosophers what made my thesis philosophical interesting) and lonely (do I really belong among the philosophers?).

I am immensely grateful to all the people who took the time to hear me out on my feeling of being lost in the academic categories and provided kind words of advice. First of all, I have to thank my supervisors, Huub Dijstelbloem and Frederica Russo, who always supported me, despite all the strange turns I took with this project and even after straying from the original research questions. At times they drew sceptical faces when I said something weird like "what this thesis on planning really needs is an analysis of the oeuvre of Willem Frederik Hermans", but they always encouraged me to follow my own path, for which I am truly grateful. Also, many thanks to the people of ASCA, Eloe Kingma, Esther Peeren and Jaap Kooijman, who similarly responded very encouragingly to the pursuit of my research interests wherever it led me.

Secondly, many thanks to my officemates, who kept me warm company in our isolated office, hidden deep inside the labyrinth of the Oude Turfmark (seriously, no one was ever able to find it). I already mentioned the immortal Jelle Bruineberg, who taught me so many valuable life-hacks to remain sane. I am also ever grateful I could share all the joys and grief that came with writing a PhD with Deva Waal. How dire things sometimes looked, together, we knew, we would reach the finish line. I am glad we never lost faith. Alex Thinius and Jeroen Stuiver were equally dear friends with whom I could share a lot of conversations and lunches. Special mention to Twan Kieboom and Humber van Straalen, with whom I was blessed enough to teach the introductory course philosophy of science. I never had more joy and satisfaction in teaching than together with you.

Thirdly, I have to express my gratitude to the PhD-candidates of the

Vossius Center, which whom I formed a journal club. Together with Jaco de Zwart, Sjang ten Hagen, Emma Mojet, Chaokang Tai and many visiting junior scholars over the years like Josephine Musil-Gutsch and Kris Palmieri, I learned what it meant to do history of science proper. Special thanks to Chaokang, who introduced me to the literature on scholarly personae from which I benefitted so much in writing the second chapter to this thesis. You all provided me with the stimulating research environment every PhD candidate wishes for. Many thanks also to the directors of the Vossius Center, Rens Bod, Jeroen van Dongen and Julia Kursell, who organised many inspiring masterclasses and seminars.

Fourthly, I want to thank all the fellow PhD-ers I met at the conferences and summer schools I attended over the years and with whom I shared invaluable conversations about our shared uncertainties of the dark academic world in which we had plunged ourselves. I want to mention especially Massimiliano Simons, Justine Loulergue, Marius Kuster, Malte Dold, Zoé Evrard, Hein Brookhuis, Henry Kalter and Jorrit Smit. Also many thanks to all the scholars present at these meetings who were willing to provide me with advice and helped me out with my first publications. I want to mention in particular Bram Mellink, Merijn Oudenampsen, Ernst Homburg, Erwin Dekker, Harro Maas and Lorraine Daston.

Fifthly, I want to thank my colleagues at the University of Amsterdam who kept the place lively through lectures, discussions and sharing a lot of beers. Many thanks to Jacques Bos for having the confidence in my teaching capacities and all the other members of The Philosophical Tradition in Context capacity group: Frans Berto, Michiel Leezenberg, Hein van der Berg and the rest. Special thanks to my dear friend Jan Overwijk for his endless confusion and distaste of analytical philosophy and unrelenting commitment to leftist politics.

Sixthly, many thanks to the helpful people of the archives that I visited for this research. In particular I want to thank Annabella Meddens, who helped me out immensely in researching the archives of the Wiener Kreis at the North-Holland Archives.

Seventhly, I am ever so grateful to all the great friends whose company I could enjoy over the years. Many thanks to Peter Huijzer, Vita Pagie, Thomas van Sonsbeek, Sander Kuik, Rik Peters, Ziggy Schipzand, David Kwa, Tamara van den Berg, Willem Hutten and all the others! All my gratitude to the nightly travellers of the Friday evening circle Erik de Lange, Henk Ruigrok

# Introduction:
## Radical Futures and Perpetuating Presents

*The famous acceleration of history about which we so much speak, have you noticed that as it accelerates more and more the historical movement advances less and less?*

—Alexandre Kojève, in an interview for *La Quinzaine littéraire* (1968)[1]

Social and economic planning may sound to some like a relic of a bygone age. From the idea that society was plannable speaks a utopian ideal and a naïve yet dangerous belief in the malleability of humankind. This idea was understandably popular in the wake of the Great Depression when human suffering urged thinking on a large scale, or in the reconstruction period after the Second World War when European powers mustered all the scientific forces at their disposal to turn the darkest of pages. For the present times, however, such radical ideas seem idle.

The word "planning" invokes the faded dream of replacing the capitalist system with socialism, supplanting the unequal distribution mechanisms of the market by the more just, centrally led distribution mechanisms of the state. Yet, after the fall of the Soviet Union and the unravelling of communist

---

1 Gilles Lapouge, "'Les philosophes ne m'intéressent pas, je cherche des sages', une conversation avec Alexandre Kojève," *La Quinzaine littéraire*, January 15, 1968. All translations of non-English sources throughout this thesis are mine.

Eastern Europe, such hopes of improving the political system were washed away. In his best-selling book, *Seeing Like a State* (1998), anarchist anthropologist James C. Scott poignantly expresses this sentiment when he speaks of central planning as "high modernism"—the "muscle-bound version of the self-confidence about scientific and technical progress".[2] Central planning was the hubristic endeavour of detached elites who shaped their utopias from a society with little regard for local knowledge, instead religiously devoting themselves to their abstract ideas.

The waning vision of central organisation gave way in the 1990s to a strong belief in decentralised organisation. Corporations replaced top-down Taylorian management hierarchies with the bottom-up Japanese management styles of *Kaizen* and *lean*.[3] In Silicon Valley, IT gurus dreamed of a networked society,[4] political activists organised themselves in leaderless independent cells in the 1999 Seattle WTO protests,[5] and horizontal markets replaced sluggish bureaucracy in the public sector.[6]

Yet, in the onslaught of decentralised organisation, central planning continued, albeit in other guises—urban planning being the only field to retain its planning moniker. Even if direct interference in markets was discouraged, it was still the government's task to stimulate economic growth through the management of the economy; planning could assist the government in enacting its task in the most efficient manner. In the 1990s, ambition for the European common market grew with the creation of new energy and financial markets that aimed to boost economies.[7] Planned markets needed to provide the structure and incentives where earlier top-down regulation had failed. As such, central planning inaugurated the neoliberal vision of a united Europe—a vision that itself might be considered rather radical and full of hubris.

---

2 James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), 4.
3 Luc Boltanski and Eve Chiapello, *The New Spirit of Capitalism*, trans. Gregory Elliott (London: Verso, 2007), 73–80.
4 Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago: University of Chicago Press, 2006), 1–4.
5 Bram Ieven, "Organiseren voor de toekomst: vo
orbij het kapitalisme," *De Nederlandse Boekengids*, February 2019.
6 Wendy Brown, *Undoing the Demos: Neoliberalism's Stealth Revolution* (New York: Zone Books, 2015), 123.
7 Thomas Biebricher, *The Political Theory of Neoliberalism* (Stanford, CA: Stanford University Press, 2018), chap. 7.

In the context of the foregoing, the Netherlands provides an interesting case study. In the Dutch language, "planning" is no longer associated with socialism and has remained part of the political vocabulary. The most important scientific advisory institute to the Dutch government on socio-economic affairs is still called the Central Planning Bureau (CPB). Moreover, the importance and centrality of the CPB in Dutch policymaking cannot be overstated. The current fragmentary political landscape of political parties, unions, businesses, and civil organisations is desperately in need of shared frameworks to coordinate their horizontal activities—a role the CPB is eager to fulfil.[8]

The discourse of planning may have changed, but not its central function. Through markets and other decentral organisations, society could still be improved, even if this happened under the narrow auspice of economic growth. Yet the waning dream of supplanting markets did alter economic planning fundamentally. Compare the following citations by two economic planners. In 1929, the pioneering econometrician and later founder of the CPB, Jan Tinbergen, wrote the following under a pseudonym in *The Socialist Guide*: "[E]conomic competition is replaced at a fast rate with deliberate redistribution, giving way to new guiding principles [for the economy]. These new principles […] have to adhere to the demands of social justice."[9] Almost 90 years later, at the 75th anniversary of the CPB, its current director, Peter Hasekamp, remarked:

> In the medium term—the next five years—we are certain that the economy will recover, as it always does […]. The economy is constantly in a process of adapting to a new reality. The labour market is adapting, new forms of activity are emerging. […] It is a combination of mentality and the invisible hand. It is how the economy works. How it always has worked.[10]

From the first citation emerges a belief in a society in transition—that the mechanisms and relationships of today's economy will be supplanted in the future, and that those future mechanisms will be more socialist, and more

---

8 Alfred Kleinknecht, "Het CPB waait met de tijdgeest mee," *Beleid en Maatschappij* 43, no. 2 (2016): 57–60, https://doi.org/10.5553/BenM/138900692016043002008.

9 Jan Dirks, "Vraagstukken van Socialistiese Ekonomie," *De Socialistische Gids* XIV, no. 6 (June 1929): 532.

10 Ulko Jonker, "'Al vinden we geen perfect vaccin: de economie past zich aan, er komt herstel,'" *Het Financieele Dagblad*, October 28, 2020.

just. From the second citation also emerges the view that the economy is always changing, albeit in a different manner. Although the economy will change, its underlying mechanisms, such as the "invisible hand", will always stay the same. The future will be different, but not radically so.

With the absence of a radically new future, one might wonder what remains of the "sweeping, rational engineering of all aspects of social life to improve the human condition" that Scott ascribed to the mindset of the central planner.[11] In fact, economic planning is now derided precisely for keeping a radical new future at bay. In a position paper of the new Dutch left-wing political party BIJ1 (literarily, "Together"), the sociologist Willem Schinkel wrote that the ideological economic models of the CPB are in service of simply maintaining the status quo. He criticised the bureau for keeping questions of the desirability of economic growth out of the political debate, forcing political parties to adhere to a growth paradigm and circumventing parliamentary discussions—in short, a form of technocracy in service of capitalism.[12] BIJ1 could not comply with the forecasts of the CPB, Schinkel argued, since the party "is the only one who is in favour of systematic change. […] Radical change: for radical equality and radical economic justice."[13] Such radical change would be at odds with the safeguarding of the status quo that the CPB is accused of. Schinkel berates the predictions of the CPB for not foreseeing the financial crash of 2008, or the current COVID pandemic. These events, Schinkel suggests, are the real harbingers of historical change, rather than economic growth or the prognoses of the CPB.

Schinkel is entirely correct when he characterises his own party as the only one in favour of radical change. However, being at the margins of the political spectrum, this sentiment is not widely shared amongst the elec-

---

11 Scott, *Seeing Like a State*, 88.

12 Schinkel is far from alone in this critique of the CPB. A legion of political commentators have made similar points, see: Mirjam de Rijk, "Hegemonie CPB moet doorbroken," *De Volkskrant*, February 1, 2016; Rob Wijnberg, "CPB-Bingo," *De Correspondent*, September 29, 2013; Uwe Becker and Corina Hendriks, "'As the Central Planning Bureau Says': The Dutch Wage Restraint Paradigm, Its Sustaining Epistemic Community and Its Relevance for Comparative Research," *Review of International Political Economy* 15, no. 5 (December 2008): 826–50, https://doi.org/10.1080/09692290802403486; David Hollanders, "Politieke partijen binden zich met CPB-doorrekeningen van partijprogramma's aan invloedrijk staatsorgaan," *Beleid en Maatschappij* 43, no. 2 (2016): 41–43,https://doi.org/10.5553/BenM/138900692016043002005.

13 Willem Schinkel, "Waarom het BIJ1-verkiezingsprogramma niet door het CPB doorgerekend wordt: de argumenten op een rijtje" (BIJ1, 2020), https://cloud.bij1.org/s/rDEoBmtSCDMxGkT.

torate. Even the Dutch Socialist Party no longer speaks of supplanting capitalism as its goal. So, what happened to our belief in the future? With no ideological challenger to the liberal capitalist system, the need for an alternative seems to have disappeared.[14] It is a complex story in which the broken dreams of the May 1968 generation, the crisis of capitalism in the 1970s, a stubborn defence of liberalism resulting from the Cold War, and the rise of neoliberalism have drowned out the belief that politics can truly alter society.[15]

Historians and cultural scholars have noted that the disappearance of the radical future is not only a political phenomenon.[16] Contemporary culture seems stuck on memories of an idealised past or historical wrongdoing, dominated by a sense of nostalgia and haunted by ghosts of a past not yet past. Something fundamental has changed in the conception of history—in the manner in which time is experienced. Intellectually, this is expressed by the many critiques on the "grand narratives" of modernity: secularisation, the scientific revolution, humanism, enlightenment, liberal democracy, etc. If historical change is still possible, it cannot come from any "development" of history. Consequently, such accounts severely problematise the notion of "progress".[17] With no prospect of progress, the historian François Hartog has argued that the distance between the present and past has disappeared; the past can no longer be conceived of as the past on its own, but only as an extension of the present backwards. Similarly, the future is simply the present

---

14 This argument has most famously been made in: Francis Fukuyama, *The End of History and the Last Man* (New York: Free Press, 1992).

15 For the influence of Cold War thinking, see: David Ciepley, *Liberalism in the Shadow of Totalitarianism* (Cambridge, MA: Harvard University Press, 2006). For the story of May 1968, see: Julian Bourg, *From Revolution to Ethics: May 1968 and Contemporary French Thought* (Montreal: McGill-Queen's University Press, 2007). For the crisis of capitalism, see: Wolfgang Streeck, *Buying Time: The Delayed Crisis of Democratic Capitalism*, trans. Patrick Camiller and David Fernbach (New York: Verso, 2014). For the relation between neoliberalism and the disappearance of the future, see: Mark Fisher, *Capitalist Realism: Is There No Alternative?* (Winchester: Zero Books, 2009).

16 See for example: Mark Fisher, "What Is Hauntology?," *Film Quarterly* 66, no. 1 (2012): 16–24, https://doi.org/10.1525/fq.2012.66.1.16; Hans Ulrich Gumbrecht, *Our Broad Present: Time and Contemporary Culture* (New York: Columbia University Press, 2014); Aleida Assmann, *Is Time out of Joint?: On the Rise and Fall of the Modern Time Regime*, trans. Sarah Clift (Ithaca: Cornell University Press, 2020).

17 Zoltán Boldizsár Simon, *History in Times of Unprecedented Change: A Theory for the 21st Century* (London: Bloomsbury Academic, 2019), 11–16; cf. Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge*, trans. Geoff Bennington and Brian Massumi (Minneapolis: University of Minnesota Press, 1984), 38–41.

projected forwards.[18] Hartog calls this conception of history *presentism* and wonders whether it might replace the modern *regime of historicity* that has dominated Western historiography since the end of the 18th century.

It is tempting to see economic planning as simply going with the political and cultural current, removing the idea of a radical future when politics no longer had a need for it. Planning, however, was once instrumental in producing viable yet radical visions of the future economy for the orientation of politics and policymaking. Would it then not be plausible that it played as significant a role in introducing and solidifying visions of the future as it did in perpetuating the present?

This thesis argues that planning was just as crucial in establishing a conception of history without the possibility of radical change as it once was for the dreams of new and better economic systems. In addition, I will argue that planning did the same for our belief in a central authority that could guide change. These issues are intimately connected. The rising enthusiasm for decentralised organisation in a time when radical visions for the future disappeared, was no coincidence. Central planning may seem a relic from the past that has merely adopted a new discourse to survive. However, central planning, paradoxical as it may sound, was also instrumental in propagating the belief in decentralised forms of organisation.

The development of planning, from a vision for centralisation and radical futures towards an ideology of decentralisation and perpetual presents, is not only a history of how the politics behind planning has changed. The great irony—or tragedy, depending on your perspective—of central planning in the capitalist societies of the 20th century is that both visions of politics were already contained in the very nature of planning from the very start. Planning has never solely focussed on a radical future. As the quote from Tinbergen above shows, planners were looking for developments in the present that could indicate change in the future. Projecting the experiences from the present into the future—whether they were of a changing society or a stable society—is the core of what economic planning entails as a political programme. Planning was only concerned with utopian dreams if the political situation gave real substance to those dreams.

The inherent tensions of socio-economic planning in relation to changing political circumstances are very pronounced in the political history of the Netherlands. Therefore, this thesis concerns the history of Dutch socio-economic planning in the 20th century. This history is intimately inter-

18 François Hartog, *Regimes of Historicity: Presentism and Experiences of Time* (New York: Columbia University Press, 2015), 15–19.

twined with the history of the CPB—today known in English as the "Bureau for Economic Policy Analysis", to distance itself from any connotation of "planning". The practices of the CPB was subject to many changes, constantly adapting to new political situations, moving from the promise of a new society to a stumbling block of technocracy and perpetuating the present. Mapping out these changes will provide an excellent source for the development that I aim to describe. Still the focus on the economic planning of the CPB is not enough to get the full picture. Consequently, I will also discuss, at least in part, the history of social and environmental planning, both at the CPB and also in various other government ministries and advisory committees.

To understand how planning practices adapted to different political situations, this thesis presents a broader development of planning in constant interaction with political issues, theory, and thought. Each chapter focuses on a different political predicament that forced planning to explore new routes via which to (re)establish its relevance and authority. The second chapter starts in a period of general dissatisfaction with free markets and the grave consequences of the Great Depression. Subsequently, the third chapter looks at planning in the reconstruction period after the devastation of the Second World War. The rise of social, environmental, and resource problems at the end of the 1960s are central to the fourth chapter, whilst the fifth chapter discusses the crisis of capitalism in the 1970s. The final chapter shows how the decentralisation ideology gained traction in the 1980s, long before the fall of the Berlin Wall when, as a result of increasing crisis fatigue, trust and faith in the state were diminishing. Describing both the internal tensions of planning and the political circumstances in which it operated, without falling into a simple internal-external distinction, is not a straightforward exercise. The precise relation between the practice of planning and political issues is easily suggested, but harder to investigate. Therefore, I will start by discussing my theoretical and methodological choices in the first chapter. I will also elaborate on how my theoretical and methodological choices result in the full picture of planning and its underlying complex of issues.

The themes that extend to the present history of Dutch planning are those of centralisation and decentralisation—of radical futures and perpetuating presents. These take the form of a question concerning the nature of *the state* and a question concerning the nature of *historicity*. The state is the most obvious central organisation that could herald social change, but it is also an entity that engenders deep societal suspicion. If the state is to inaugurate a new future, on whose initiative does it act? Is the state the actor of

historical change, or does it act simply in accordance with the demands of society? Economic planning adds a new layer to this question, since the guidance of state action by scientific experts is often accused of being technocratic. In other words, is it not at odds with democratic ideals if the state acts on the instructions of planners? The question of historicity, meanwhile, ask why things are part of history and how this relationship makes persons, events or institutions historically meaningful. Traditionally it denotes the historical authenticity of things and not their merely mythological or fictional qualities. This historical relationship presupposes the relationship between past, present, and future. These questions take the form of how the future is opened up and provides events, persons, and objects with a temporality and historical meaning, accepting that they will someday slide into the past. The future can be open, narrow, or closed off; it can promise radical change or a continuation of the status quo. I will argue that planning is not only the product of presuppositions and discussions on these matters, but also shapes those questions via planning theory and practice.

Usual definitions of planning, such as the central management of the economy by governments or the search for the most efficient distribution mechanisms, often contain scant traces of discourses on state and historicity. Consequently, histories of planning seldom discuss these matters directly. In general, if histories of planning want to place what is otherwise the very self-contained world of planning in larger questions of society, culture, and politics, they have the difficult task of navigating both the highly abstract and technical world of planning theory and the very concrete and messy practice of planning itself. In short, discussing the history of planning in relation to politics and society does not naturally follow from planning theory and practice itself. It is therefore unsurprising that the best studies on the subject have come from the interdisciplinary field of science studies, which amongst others encompasses ideas and theories from history of science, the sociology of scientific knowledge, critical theory, and the history of technology.[19]

Notable examples that provide inspiration here include Adrienne van den Bogaard's work on the history of the CPB; Timothy Mitchell's research on "the rule of experts" and "economentality"; Daniel Hirschman and Elizabeth Popp Berman's study of the influence of economists on government policy; Marion Fourcade's investigation of the development of the economics profession in different societies; and Philip Mirowksi's polemics

---

19 Michael Lynch, "Ideas and Perspectives," in *The Handbook of Science and Technology Studies*, Third edition (Cambridge, MA: MIT Press, 2007), 10.

against the conception of the market in neoliberalism.[20] Although some of these studies discuss the role of the future in economic planning,[21] there does not exist to date a thoroughly theoretical elaboration on the subject. Similarly, whilst the state often features in these accounts, its precise relation to planning and the future remains under-theorised. This lack is perhaps unsurprising, as the state and historicity are complex, each with their own discourses and histories that are not self-evidently part of the history of science. Questions of the state are often relegated to political theory and intellectual history, neither of which have strong ties to science studies. Indeed, historicity is almost exclusively discussed in the philosophy of history and historiography, which falls outside of the scope of science studies, as history is often considered part of the humanities. It is therefore worthwhile to widen the scope beyond science studies proper when discerning the complex tangle of issues involved in planning.

In the first chapter, I situate this study at the intersection of intellectual history and the history of knowledge (comprising both the history of the sciences and the humanities). Here, I also discuss relevant literature from intellectual history on the state and historicity, which in itself provides me with sufficient theoretical ground upon which to properly establish the relevant issues. However, since intellectual history and the philosophy of history and historiography do not say much about the scientific underpinnings of planning, some theoretical innovation that ties the subdisciplines together is needed. In particular, I develop a new concept of the *decisionist imaginary* in order to connect the interrelation of science, state, historicity, and planning. As indicated above, the main issue concerning the state and planning is if and how the state is to act and on whose initiative. I take these to be questions of decision making. As I will argue throughout this thesis, economic

20 Adrienne van den Bogaard, *Configuring the Economy; The Emergence of a Modelling Practice in the Netherlands, 1920—1955* (Amsterdam: Thela-Thesis, 1997); Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity*, First edition (Berkeley: University of California Press, 2002); Timothy Mitchell, "Economentality: How the Future Entered Government," *Critical Inquiry* 40, no. 2 (2014): 479–507; Daniel Hirschman and Elizabeth Popp Berman, "Do Economists Make Policies? On the Political Effects of Economics," *Socio-Economic Review* 12, no. 4 (October 1, 2014): 779–811, https://doi.org/10.1093/ser/mwu017; Marion Fourcade, *Economists and Societies: Discipline and Profession in the United States, Britain, and France, 1890s to 1990s* (Princeton: Princeton University Press, 2010); Philip Mirowski and Edward Nik-Khah, *The Knowledge We Have Lost in Information: The History of Information in Modern Economics* (Oxford: Oxford University Press, 2017).

21 Mitchell does so, see also: Jens Beckert, *Imagined Futures: Fictional Expectations and Capitalist Dynamics* (Cambridge, MA: Harvard University Press, 2016).

planning has always been a science of decision making. Most fundamentally, it is a science that gives shape to political decisions. Moreover, it does so by giving decisions a temporal dimension, relating decision making to the development of society. Understanding the formative influence of planning on politics, it is most fruitful to study the planning techniques and tools—models, graphs, schemes, tables, surveys, indicators—and the images of state and society contained within them. Such images not only shape the conception of the state, but also impact our perception of what democracy entails and the role scientific expertise has to play in a democratic society. In other words, they shape our conception of politics and the political.[22] Consequently, a large part of this study is devoted to the investigation of planning tools and images of the state, society and the future.

Placing the tools and imaginaries of planning in a larger political and social context, it is important to relate planning to broader temporal experiences that go beyond political decision making. As the quotes by the two directors of the CPB above indicate, time was experienced in fundamentally different ways before the war and during the COVID crisis—from a society in motion to an ever perpetuating economy. Planning was not operating on a separate plain from these experiences when producing its tools and imaginaries. Planning responded, but also gave shape to how time was conceived in politics. To be more precise, I will argue that planning reacted to multiple emerging experiences of time by constantly reconceptualising historicity. Using the works of the historian Reinhart Koselleck, the first chapter will develop an adequate notion of what experiences of time entail, as well as what kind of methods can be used to investigate such experiences. As will become clear in the course of this thesis, each of the political predicaments mentioned above correspond to specific experiences of time. This also brings me to my main research questions: How has the changing conception of historicity given way to different ideas of the future in Dutch politics in the 20th century? How has planning shaped this conception, and how has the imaginary of politics changed in the process? As should be clear from this introduction, in particular, I am interested in how a politics once dominated by a future that would radically alter society became transformed into a politics with a vision of an ever perpetuating present.

---

22 The difference between politics and the political will be explained in the first and sixth chapters. For more on this distinction, see: Chantal Mouffe, *The Return of the Political* (London: Verso, 1993); James D. Ingram, "The Politics of Claude Lefort's Political: Between Liberalism and Radical Democracy," *Thesis Eleven* 87, no. 1 (November 1, 2006): 33–50, https://doi.org/10.1177/0725513606068774.

As I will argue in the conclusion, this transformation not only entailed a change in the conception of historicity, but also in the conception of the state. It seems that in our contemporary political imagination, the state only functions as an administrative and surveillance apparatus, whilst its more symbolic functions—those of representation (of the community) and as the founder of a normative order, or political actor—have disappeared into the background. This is especially true in the Dutch context, where the state is often referenced as "*de overheid*", which denotes both the state and the government, blurring the distinction between the two. These conclusions are not merely of historical interest. They reveal much about the fundamental relationship between the state and historicity. My research challenges present-day political theory and science studies to place the state front and centre (again) in political analysis. Moreover, I argue that the historical dimension of the state should be central to such an analysis. Likewise, for the philosophy of history and historiography, it points towards the crucial role of the state in our conception of historicity. As such, my study addresses the current predicament of presentism as diagnosed by Hartog. To what extent is presentism the right qualifier for our current understanding of historicity? What are the political issues that emerge from presentism? Moreover, if indeed the situation is as dire as Hartog suggests, how can a future be conceived beyond a perpetuating present? Consequently, the ambition of this research is to be both a historical and a philosophical study.[23]

---

23 What it entails to combine philosophy and history will be discussed in section 1.7.

# CHAPTER 1.

# Planning and Experience:
## Between History and Philosophy

*We are expelled into the dust of our decisions.*
*Knowing it would be this way hasn't*
*made any of it easier to understand, or bear.*

—John Ashbery, *Spring Cries* (1994)[1]

Reinhart Koselleck argued that with the arrival of modernity, politics be-
came fundamentally future-oriented. In the second half of the 18th century,
a new conception of historicity arose that formed the substrate for modern
politics revolving around the progress of society.[2] Socio-economic planning
is an inherent part of this modern politics of time. Although the experience
of time and the conception of historicity that emerged around 1800 persist
to this day in the form of what François Hartog calls a *regime of historic-
ity,* these experiences and conceptions have not been entirely stable.[3] Our
current political projects are still forward-facing, but have been oriented in
different manners during the past 250 years. It is precisely these shifts, both
in the experience of time and in conceptions of historicity in the 20th cen-
tury, that this thesis intends to chart and relate to different Dutch planning

---

1 John Ashbery, *And the Stars Were Shining* (New York: Farrar Straus Giroux, 1994).
2 Reinhart Koselleck, "Modernity and the Planes of Historicity," in *Futures Past: On
the Semantics of Historical Time*, trans. Keith Tribe (New York: Columbia University
Press, 2004), 9–25.
3 François Hartog, *Regimes of Historicity: Presentism and Experiences of Time* (New
York: Columbia University Press, 2015), xv.

projects. The task for this first chapter is to identify the theories and methods that will enable me to describe the plurality of experiences and conceptualisations of time and history.

Intellectual history, both in the English tradition of the history of political thought and the German tradition of conceptual history (*Begriffsgeschichte*), has thoroughly investigated the relationship between time and politics.[4] Furthermore, the philosophy of history and historiography (also related to the German *Historik*) has investigated the structure of time experiences and their relation to historicity and history, both as an academic discipline, and as a prevailing mentality.[5] They seem to provide a logical starting point for my theoretical explorations. However, since the subject of this thesis is not historiography, but socio-economic planning, which is studied by neither discipline, this chapter starts with a discussion of the relevant literature on planning, the state, and history in science and technology studies (STS). Investigating what STS lacks in terms of theory, in the light of the aims of this study, will provide a more focussed starting point for this theoretical and methodological chapter.

As already became clear in the introduction, a discussion on the relation between historicity and planning cannot escape the notion of the state. Unfortunately, neither STS nor the philosophy of history and historiography say much about the relation between historicity and the state. Therefore, once I have discussed the theories of the experience of time and historicity in sections two and three, the fourth section will focus on the notion of the state, which I will again approach from both an STS and an intellectual history angle. How to bring the state, planning, and historicity together will be discussed in sections five and six.

Invoking the philosophy of history invites a legion of philosophical questions concerning the relation between historical methods and philosophical implications. To tackle those issues, the seventh section provides a detailed reflection on the relation between history and philosophy. This discussion will provide an overview of the complex of issues I address, as well as the aims of this thesis. The precise methods employed to tackle those aims and issues will be laid out in sections eight and nine. I close this chapter

---

4  For a comparison between the two traditions, see: Ian Hampsher-Monk, Karin Tilmans, and Frank van Vree, *History of Concepts: Comparative Perspectives* (Amsterdam: Amsterdam University Press, 1998).

5  Aviezer Tucker, *Our Knowledge of the Past: A Philosophy of Historiography* (Cambridge, UK: Cambridge University Press, 2004), 1–22, https://doi.org/10.1017/CBO9780511498381.

by giving an outline of the existing fields and literature to which I hope this work will contribute.

# I. Theoretical Framework

## 1.1 Planning as Representing and Intervening

As noted in the introduction to this thesis, very few histories of planning are directly concerned with questions of the state and historicity. James C. Scott's *Seeing Like a State* (1998) is one of the few studies to do so. One of the main tenets of his book is that central planning is a form of high modernism, which in itself entails a particular view of society—one inextricably bound up with how states "attempt to make a society legible".[6] To put it simply, the high-minded belief in an engineerable society presupposes a central point from which society can be transformed into a legible object that can be subsequently manipulated. This central point is the state. Moreover, improving society's conditions entails a break with the past, undoing its previous ills and shortcomings: "The temporal emphasis of high modernism is almost exclusively on the future. […] The past is an impediment, a history that must be transcended; the present is the platform for launching plans for a better future."[7] Therefore, the high modernism of central planning presupposes a central platform that can force a break with the past by altering the present society. Again, according to Scott, this platform is the state.

    Although Scott's study provides valuable theoretical insights on the relation between the state, planning, and historicity, crucial shortcomings of his theoretical framework prohibit me from adopting it for this study. However, its value here can be realised via an analysis of these shortcomings, providing a starting point in the search for a more adequate framework. This first section comprises a discussion of the model underlying Scott's study, in which its inherent flaws offer important leads in other theoretical directions.

    It should be noted that Scott never writes about his theory of planning in terms of a model. However, by comparing his theory with similar frameworks in STS, a coherent abstract structure can be conjured up that provides the imaginative tools for his study. Freely adapted from Ian Hacking's work,

---

6  James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), 2.

7  Scott, 95, emphasis added.

I describe this model as the *representing and intervening model* (R-I model).[8] Scott's model imagines planning to shape society analogously to the manner in which the scientific method observes its object. Hacking has argued that the act of observation in modern science is not a passive one: Scientists do not look at objects as they are simply given to them in nature. Instead, they actively intervene in their object to make it observable, for example, by studying phenomena in a controlled environment. By manipulating an object under controlled conditions, scientists are able to tease out specific aspects of that object, which subsequently can be represented in scientific literature.[9] Scott's analysis of high-modernist planning follows more or less the same model, with the state acting as the scientific observer and society as its subject. Before planning can become reality, society has to be turned into a readable map through complex practices—statistics, surveys, registers, the standardisation of education, language, and legal discourse—introducing new entities such as class, ethnicity, and employment in the process. Society is projected onto a grid that makes its order readable, yet this process also entails a transforming of society into a grid. In short, representing society as a knowable object entails intervening in its very fabric.

A good example of this in the context of economic planning is the construction of the entity of "the economy". Before the 1950s, the use of the notion "the economy" to denote the whole of economic activity within a given society or nation was not common parlance. Instead, the prefix "economic" was used to denote specific aspects of what we now call the economy, for example, "economic development". The introduction of the technique of national accounting—a framework that gives an overview of all economic activity in a nation state—encourages one to see economic problems more in terms of their inter-relationships. The view of a unified whole of the economy only took off after the Second World War when the Organisation for European Economic Co-operation (OEEC) adopted and standardised the framework to distribute the funds of the European Recovery Program (better known as the Marshall Plan), introducing Gross Domestic Product

---

8 Ian Hacking, *Representing and Intervening, Introductory Topics in the Philosophy of Natural Science* (Cambridge, UK: Cambridge University Press, 1983).

9 Hacking is not alone in this assessment. Variants on this thesis form the bedrock of modern science historiography, see for example: Gaston Bachelard, *The New Scientific Spirit*, trans. Arhtur Goldhammer (Boston, MA: Beacon Press, 1984); Bruno Latour, "Give Me a Laboratory and I Will Raise the World," in *Science Observed: Perspectives on the Social Study of Science*, ed. Karin Knorr Cetina and Michael Mulkay (London: SAGE Publications, 1983), 141–70.

(GDP) as the most important economic indicator.[10] However, the national accounting framework was not a neutral tool in the description of economic activity. To make it work, governments and statistics bureaus had to standardise practices amongst many public and private organisations. For example, businesses had to provide data that could fit the national accounting frameworks. Meanwhile, these standardised practices had considerable societal impacts. For example, national accounting considered the domestic labour of women unproductive in economic terms, thus erasing the contributions of millions of women to the economy.[11] Consequently, national accounting is just as much a tool for the description *of* economic activity as it is a tool for engaging *in* economic activity. To speak with Bruno Latour, accounting frameworks become accurate descriptions of the economy if—and *only* if—statisticians are able to let the economy resemble those frameworks.[12]

Scott is not alone in imaging planning as representing and intervening strategy. In different guises, particularly in the field of STS, this model has been utilised by prominent scholars such as Michel Callon, Timothy Mitchell, and Mary Morgan.[13] One of the major advantages of this model is that it adopts a certain agnosticism about what exists in the world. Entities such as the state or the economy are not simply given. Instead, the processes that establish these entities have to be revealed. Consequently, this model shows that the operations of macro-entities are dependent on the local actions of micro-actors, and are subject to high levels of variability. What the state or the economy are constantly changes and can thus be described as a historical process. As will become clear in the following sections, these are the aspects of Scott's model that I would like to retain in my own theoretical framework

---

10 Tomo Suzuki, "The Epistemology of Macroeconomic Reality: The Keynesian Revolution from an Accounting Point of View," *Accounting, Organizations and Society* 28 (2003): 471–517, https://doi.org/doi:10.1016/S0361-3682(01)00061-7; Matthias Schmelzer, *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm* (Cambridge, UK: Cambridge University Press, 2016), chap. 1.

11 Marilyn Waring, "Counting for Something! Recognising Women's Contribution to the Global Economy through Alternative Accounting Systems," *Gender and Development* 11, no. 1 (2003): 35–43.

12 Latour, "Give Me a Laboratory," 161–62.

13 Michel Callon, "An Essay on Framing and Overflowing: Economic Externalities Revisited by Sociology," in *The Laws of Markets*, Sociological Review Monographs (Oxford: Blackwell Publishers, 1998), 244–69; Timothy Mitchell, "Fixing the Economy," *Cultural Studies* 12, no. 1 (January 1998): 82–101, https://doi.org/10.1080/095023898335627; Mary S. Morgan, "Seeking Parts, Looking for Wholes," in *Histories of Scientific Observation*, ed. Lorraine Daston and Elizabeth Lunbeck (Chicago: The University of Chicago Press, 2011), 303–25.

and methodology.

However, the R-I model also has some drawbacks when it comes to the historical inquiry of planning. Three shortcomings lead me to discard large parts of the model and replace them with the theories of other authors. First, the model falls short in addressing historical changes in the conception of planning. For example, Scott addresses the experience of time when he states that high modernism is always focussed on the future and seeks to break with the present.[14] However, whether there could be a form of planning that does *not* seek such radical breaks, remains unaddressed. As I already indicated in the introduction, contemporary Dutch planning is best characterised as that of a perpetual present. How to account for this variant of planning? The question of how changing conceptions of time—from futurism to presentism—alter the theory and practice of planning remains obscure. In other words, a firmer theory of historicity is needed—something I provide in the subsequent two sections.

Second, the R-I model is unable to address what sets the state apart from other social institutions, such as firms or political parties. This deficiency becomes especially apparent if one wants to establish how acting *as*, or *in name of*, the state differs from acting as any other macro-actor (e.g., a multinational), or the acting of agents in general. The only characteristic Scott identifies that makes the state unique is its centrality. Likewise, Latour speaks about *centres of calculation* to explain how practices that differ widely in nature, such as surveys, registers, and standardisation—some of which are carried out by non-state actors—work together in a state apparatus and can be coordinated from a central point.[15] However, not every centre of calculation is state-bound. It leaves open the question: What keeps the state acting as one, if it is made up from a heterogeneous assemblage? This will be the focus of the fourth section.

Third, the representing and intervening model does not adequately tackle the issues of democracy and technocracy that haunt planning. In Scott's analysis, the presence of a well-developed civil society is the most important buffer for the hubris of the planner's greatest ambitions. Planning will always have authoritarian tendencies because of its reliance on top-down perspectives and neglections of *m tis*—local forms of knowledge. Attention to these latter forms of knowledge must always come from local communities themselves. Consequently, the question whether planning could depart

---

14  Scott, *Seeing Like a State*, 95.
15  Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Cambridge, MA: Harvard University Press, 1988), 232–41.

from a more democratic basis, or is necessarily always elitist and undemo-
cratic, remains unaddressed. The model in general, likewise, propagates the
idea that the participation of local actors is vital in the success of plans on
the state level, however, it formulates this participation solely in terms of a
counterweight to the power of the state. It says little on how planning can be
democratic on an institutional level. Whilst the R-I model has inspired some
very innovative views of democracy, these theories often rely on involving
evermore actors in the democratic process, rather than an improvement of
liberal democracy itself.[16] A more apt manner to account for democracy in
relation to planning is explored in the fifth and sixth sections.

　　Concluding, although Scott provides an impressive insight into the rela-
tionship between planning, the state, and historicity, his model cannot pro-
vide the theoretical backbone for my research. Therefore, in the following
sections, I develop an alternative framework via which to understand plan-
ning in theoretical terms. To this end, I will apply a tried and tested approach
in philosophy: adapting the theoretical language of other philosophers for
my own specific purposes.

## 1.2 Historicity and the Experience of Time

Not concerned with the humanities, STS is often weary of the grand narra-
tives of history (such as modernity, revolutions, and democratisation) and
employs a more "constructivist" approach. As such, STS does not take the
historical change in historicity as an object of research. The intimate rela-
tion between time and politics is better addressed in intellectual history. For
example, John Pocock, in his studies of republican traditions, has argued
that a change in the experience of time—from stable recurring conventions
in the Middle Ages to a contingent, ever changing conception in the renais-
sance—gave way to the notion of the *reason of state*, predicated on the idea
that the prince had to decide and act on the right moment to keep his lands
together. Such action, he argued, escaped the principles of tradition. Peacock
suggests that

---

16 See for example: Bruno Latour, "From Realpolitik to Dingpolitik," in *Making
Things Public: Atmospheres of Democracy*, ed. Bruno Latour and Peter Weibel (Cam-
bridge, Mass: MIT Press, 2005), 4–31; Noortje Marres, "The Issues Deserve More
Credit: Pragmatist Contributions to the Study of Public Involvement in Contro-
versy," *Social Studies of Science* 37, no. 5 (October 1, 2007): 759–80, https://doi.
org/10.1177/0306312706077367.

> the individual employed […] a blend of prudence and faith on those oc-
> casions when the stream of contingent and particular events faced him
> with a problem so individual that neither reason nor syllogism, expe-
> rience nor tradition, provided a readymade answer to it. Only on these
> occasions […] did he behave like a decision-making animal.[17]

The idea of tradition, so vital to the medieval conception of politics, no lon-
ger held in contingent affairs and particular events. Instead, it paved the way
for the state as a central entity in the political imagination, and of the sover-
eign as decision maker.

Although Pocock reveals vital information about the relation of time,
power, and state, for the theoretical exploration of this thesis I will focus
on a later development. As already pointed out in the introduction, I am
particularly interested in the relationship between the conduct of politics in
relation to the future or, to put it differently, how politics became future-ori-
ented. The most renowned argument for a fundamental shift in historicity
between 1750–1850, resulting in a whole new form of politics, was made
by Reinhart Koselleck. In the ten years after his death in 2006, Koselleck's
fame grew extensively, exerting an enormous influence on the philosophy
of historiography.[18] Therefore, his ideas provide an obvious starting point.
Moreover, Koselleck's work forms a suitable basis for two additional aims
of this section. First, Koselleck's analysis is grounded in a theory of time
experience, which forms the basis of his research on shifts of historical time.
Second, since Koselleck connects the fundamental shift in historicity to poli-
tics and historiography, it gives a valuable insight into what makes historical
science historical. My argument is that, just as history as an academic field is
primarily concerned with historical sense, so too is planning concerned with
historical sense—albeit more forward looking.

Koselleck's method of studying the changing conceptions of historici-
ty—which he referred to as conceptual history, or *Begriffsgeschichte*—was to
map out the changing meaning of political concepts. An obvious example
was the notion of "revolution". The Latin term "*revolutionem*" simply meant
revolving—to turn or rollback. For instance, in the 15th century, the French
term "*revolution*" was used to describe the rotating courses of the celestial

---

17 J. G. A. Pocock, *The Machiavellian Moment: Florentine Political Thought and the
Atlantic Republican Tradition* (Princeton, NJ: Princeton University Press, 1975), 49.
18 Ethan Kleinberg, "Introduction: The New Metaphysics of Time," *History and
Theory* 51, no. Virtual Issue 1 (August 2012): 3.

bodies. In its political meaning, it was associated with the ideas of Plato and Aristotle: that different regimes of government such as democracy, ochlocracy, tyranny, and oligarchy would follow each other, and that the failure of one form of government would lead to the establishment of another—the so-called *Kyklos*. However, by the time of the American and French revolutions, the meaning of the notion had shifted. In its modern sense, "revolution" constitutes a turn to a new and unprecedented form of government. Revolution thus no longer leads back to earlier stages, and its political meaning has lost its cyclical inference.[19] "Revolution" now hails the announcement of a new and open future.

Koselleck thought that the semantic shifts in political concepts reflected deeper social and economic changes.[20] To understand this relationship between concepts and social change, he sketched a phenomenology of everyday social life, making the experience of time the connective tissue between social and conceptual history. To give a brief outline of this theory, I will analyse a short example derived from Koselleck's own work.[21]

In general, an individual would experience time with a certain stability in their everyday life. For example, each day the postman arrives with the mail. Additionally, community issues are to be discussed every two weeks in a town hall meeting. Such "everydayness" promotes a stable experience of time in which life is understood in term of recurrent events.[22] However, such recurrent events might already seem a little more uncertain when different generations compare their everyday routines. That is to say that whilst habits change slowly, when compared between generations, they do so in discernible ways. Mail is no longer delivered by horse and cart, but rather via motorised vehicles, allowing mail to travel longer distances in less time. Community issues are no longer discussed in townhalls, but also in coffeehouses. Indeed, the communities addressed in such meetings are no longer solely personal, small, or local, but rather encompass national or even global contexts. As such, on top of the experience of time as "everydayness", an experience of time as slowly evolving is situated. Although this second level

---

19 Reinhart Koselleck, "Historical Criteria of the Modern Concept of Revolution," in *Futures Past*, trans. Keith Tribe (New York: Columbia University Press, 2004), 49.
20 Reinhart Koselleck, "Begriffsgeschichte and Social History," in *Futures Past*, trans. Keith Tribe (New York: Columbia University Press, 2004), 75–92.
21 Reinhart Koselleck, "The Unknown Future and the Art of Prognosis," in *The Practice of Conceptual History: Timing History, Spacing Concepts*, trans. Todd Presner (Stanford, CA: Stanford University Press, 2002), 131–47. I have altered the example to fit my purpose here.
22 Koselleck, 135.

is less stable than everyday routines, as change is noticeable in one lifetime, this experience of time is still based on repetition, since it forms a recurrent pattern between generations.[23]

However, the experience of stable time could be radically thrown off balance in times of upheaval. Political turmoil, social-economic ruptures, and new technologies can alter everyday habits in such a dramatic fashion that people experience a radical shift in their everyday practices. Continuing the above example, due to technological innovation, mail is often no longer physically delivered, but can arrive digitally at any moment of the day—its form has fundamentally changed. Politics are no longer solely discussed in public spaces, but more so on social media, where public and private messages start to blend. These changes lack a recurrent nature. The introduction of the internet, for instance, is a unique historical happening, experienced neither by previous, nor indeed future, generations. Such changes are singular and therefore instil an experience of time based not on recurring, but rather on unique events.[24]

The possible ways in which humans experience time is structured by everyday events, whether these are recurrent, evolve slowly, or change radically. This constitutes what Koselleck calls a *space of experience*. Additionally, by layering these experiences, human beings conceptualise *historicity*—the historical sense of things. Particular to the form of historicity that arose around 1800 was its subjection of all the layers of time experience into one singular conception of history. In other words, there is only one temporality of which every event is part. As Koselleck contended, it was in the *Sattelzeit* (the age between the early modern period and modernity, 1750–1850) that our conception of plural histories was transformed into a singular history.[25] Explaining this singular form of history, he introduced a second notion, often paired with the space of experience: the *horizon of expectation*. When faced with radically changing events, people no longer tended to base their expectation of the future on recurrence. Everything that had previously been seen as recurrent could be wiped away by radical change. Consequently, unique events structured all time experiences. Things that appeared stable and re-

23  Reinhart Koselleck, "The Eighteenth Century as the Beginning of Modernity," in *The Practice of Conceptual History: Timing History, Spacing Concepts*, trans. Todd Presner (Stanford, CA: Stanford University Press, 2002), 159.

24  Koselleck, "The Unknown Future," 140.

25  Reinhart Koselleck, "Historia Magistra Vitae: The Dissolution of the Topos into the Perspective of a Modernized Historical Process," in *Futures Past*, trans. Keith Tribe (New York: Columbia University Press, 2004), 33.

curring suddenly appeared just as finite as human lives. This sense instilled the idea of progress.[26]

As radical things happened in the (proximate) past, so radical things could be expected to happen in the future. As such, promises of a better world could find their fulfilment in such a new future as is, for example, the case in a revolution. In this manner, what people experience in their daily lives—the space of experience—determined the horizon of expectation. *Vice versa*, the expectation of the unprecedented could give way to the feeling that the stability of everyday events was, in reality, unstable, or could be changed. An expectation of a more just society could open up a space of experience in which activities could revolve around working towards a more egalitarian and just society—in other words, a future-oriented political practice.[27] The space of experience and the horizon of expectation are thus co-constitutive.

What Koselleck set out in the interplay of his two theoretical notions was a theory of historicity. Historicity in this definition consists of linking the past, present, and future in a particular manner. According to Koselleck, in pre-modern times, the linking of time dimensions was done in terms of recurrence or cycles, whilst the modern concept of historicity links past, present, and future to a development that is singular in nature. Although many of these developments can be identified (rationalisation, secularisation, individualisation, emancipation, to name but a few) their defining characteristic is *progress*. Things in modern historicity move forward and do not return to previous points. In this sense, things that have happened are gone and will never occur again. This lost past forms the proper object for modern historiography. The fact that history can study the past as an object standing on its own—that is to say, as something radically different from the present—is only possible thanks to the openness of the future.

Historicity comprises the linking of past, present, and future. In the modern form of historicity, the past gains meaning by linking sequences of events to a single development. For example, the beheading of Louis XVI gains meaning by being part of a development in which people emancipate themselves from traditional political authority. As things in the past gain a historical meaning, things in the present similarly receive a historical sense. That is to say, things are part of history since they are part of a development—they have changed or will change in the future. For example, our

---

26 Reinhart Koselleck, "'Space of Experience' and 'Horizon of Expectation': Two Historical Categories," in *Futures Past: On the Semantics of Historical Time* (New York: Columbia University Press, 2004), 271.
27 Koselleck, 257.

national parliament is historical as it is part of a development of emancipation of the people. By linking events to developments, historiography thus ultimately links the past and the present by virtue of an open future.

One way of conceiving of this historiographical linking of historical meanings is the domestication of the future by modern history. As Zoltán Boldizsár Simon has recently argued, history renders the events of the future familiar by telling how they will relate to developments that have already occurred in the past. Simon suggests that

> the modern idea of history is an intellectual tool Western modernity put into use to appropriate and thereby also to enable perceived novelty, on the one hand, and to work toward the achievement of this very novelty which—once being appropriated—could appear as a desired future state of human affairs, on the other.[28]

Another way of conceiving this relation is provided by Jörn Rüsen. He argues that the search for historical meaning (*Sinn,* in German) often begins with a rapid change or disruption in our everyday experience of time, causing a breakdown of historical meaning in the present. The writing of history, therefore, is born in the practical realm from a loss of meaning.[29] Historiography, consequently, seeks to re-establish that meaning through a narrative that by definition conceives of actors in such a manner that they act meaningfully for the development of that narrative. Simon speaks similarly about *the story* of history, which tells us how to act in a meaningful manner towards achieving a desired future.[30] Rüsen's argument is therefore similar to that of Koselleck. A typical historical narrative would be, for example, the manner in which the trauma of the violence of the French Revolution gains meaning in reference to a past development in which people emancipated themselves from the shackles of traditional authority, bringing hope for the future.

Whether or not Simon and Rüsen are correct, history in both accounts performs a bridging function between the past, present, and future. This was an observation already made by Koselleck when he suggested that, in the wake of the French Revolution, a singular experience of time did not only

---

28 Zoltán Boldizsár Simon, *History in Times of Unprecedented Change: A Theory for the 21st Century* (London: Bloomsbury Academic, 2019), viii.

29 Jörn Rüsen, *Evidence and Meaning: A Theory of Historical Studies* (New York: Berghahn Books, 2019), 15.

30 Zoltán Boldizsár Simon, "(The Impossibility of) Acting Upon a Story That We Can Believe," *Rethinking History* 22, no. 1 (January 2018): 105–25, https://doi.org/10.1080/13642529.2017.1419445.

manifest itself as the dominant form of historicity, but time was also experienced as accelerating. Singular events dominated the everyday experience to such an extent that it felt as if the future was breaking into the present at an increased speed.[31] As such, the gap between the space of experience and the horizon of expectation was growing: The everyday experiences of today had little in common with the expectations for the future. For Koselleck, this meant that a "self-accelerating temporality robs the present of the possibility of being experienced as the present".[32] Hence, revolutions—with their promises of a better future, with the acceleration of time, and the corresponding uncertainty this creates—could not build a stable future. They only invite an opposing reaction in the form of reactionary politics. As a result, revolution and its reactionary counterpart are caught in the interplay of constant forward-moving change. With no fundamental experience to differentiate between the present and the future, the gap between experience and expectation becomes so wide that the future assumes a utopian form. Constant misery over revolutions gives way to a vision of the future without any connection to the experience of the present.[33] In such a situation, the meaning or narrative of history is utterly lost: Without practices to herald the utopian future, human actions seem idle in the course of history.

History, Koselleck thought, had to play a crucial role in undoing the predicament of the increasing gap between the space of experience and the horizon of expectation, writing:

> [There] exist long-term formal structures in history which allow the repeated accumulation of experience. But for this, the difference between experience and expectation has to be bridged to such an extent that history might once again be regarded as exemplary. History is only able to recognize what continually changes, and what is new, if it has access to the conventions within which lasting structures are concealed. These too must be discovered and investigated if historical experience is to be transformed into historical science.[34]

The ideal of historiography presented here by Koselleck reveals that the future has an open character in which radical new things can emerge, whilst also showing that the structures of the past repeat, making the future stable

---

31 Koselleck, "Two Historical Categories," 270.
32 Koselleck, "Modernity and the Planes of Historicity," 22.
33 Koselleck, "Two Historical Categories," 261.
34 Koselleck, 275.

and allowing for a narrative in which actors can meaningfully act on political situations.

Koselleck considered planning a typical product of the modern form of historicity that further spurred the idea of an unstable future. Planning conceptualised an open future with unprecedented events, making the experience of time an unstable affair. As he put it: "Since the future of modern history opens itself as the unknown, it becomes plannable—indeed it must be planned. And with each new plan a fresh degree of uncertainty is introduced, since it presupposes a lack of experience."[35] However, this assessment does not seem entirely fair. As Koselleck's ideal of history included the "long-term formal structures" of social developments, one can wonder whether planning is not also engaged with these long-term structures. As Tinbergen's quote from the introduction testifies to, early planners were not simply projecting an uncertain future in which humankind could make the world anew. Tinbergen was looking in the present to discern the long-term developments of capitalism that would make a radical new future possible. In that sense too, planning was bridging the gap between past, present, and future. In Tinbergen's ideal, planning would make the open future just as stable and meaningful as history would. Therefore, it is my suggestion that in their foundation, history and planning are not that different. In addition, planning presents a narrative that gives historical meaning to things, not only by linking past, present and future, but also the sequences of the past to larger developments that render the future more familiar and more stable, such as capitalism and economic growth.

Different to historiography perhaps, the duality of modern historicity—breaking the future open whilst also providing some stability for that future—was never really resolved in planning. Destabilising the future whilst simultaneously stabilising it remains the essential tension inherent in planning projects. The differences in opinion between the two planning directors quoted in the introduction bear testament to this tension. Tinbergen emphasised that all modes of economic production are currently changing, whilst Hasekamp specifically emphasises the stability of economic law underlying the chaos of the COVID crisis. Both are expressions of the bridging function of planning, but one ends up celebrating a radically open future, whilst the other invokes a historical sense of a perpetual present.

---

35  Koselleck, "Historia Magistra Vitae," 39.

## *1.3 Presentism and the Plurality of Time Experiences*

In the light of the aims of this thesis, Koselleck provides a grounded theoretical analysis of the relationship between experiences of time and prevailing forms of historicity. Moreover, as I hope to have shown, Koselleck's theory provides the basis upon which socio-economic planning as a fundamental historical activity can be conceptualised, thus bridging the gap between the space of experience and the horizon of expectation. Although Koselleck stressed the plurality of time experiences and how a singular understanding of historicity consisted of multiple layers of time, his conception of history as singular progress remains rather uniform. In other words, he does not account for different modes of modern historicity in relation to the shifts in the experiences of time that have occurred after 1850. This is not to say that Koselleck did not have the theoretical tools at his disposal to analyse these shifts. Rather, he only analysed different experiences of time in relation to an all-encompassing modern idea of progress. Consequently, I will shift my focus in this section to recent literature that, in the wake of Koselleck's work, has tried to discover how our conception of historicity has changed in the 20th century.

That something fundamental has shifted in our modern conception of historicity in the second half of the 20th century is suggested by Hartog in his *Regimes of Historicity* (first published in 2005).[36] The notion of "regimes of historicity" expresses the dominant order of time and is in that sense comparable to how Koselleck analysed the horizon of progress as compressing the plurality of experiences of time into one singular history: It relates past, present, and future in a specific hierarchy, producing history with a specific sense or meaning. In addition to Koselleck, Hartog, who does not view the ordering of time as a uniquely Western phenomenon, is strongly influenced by the structuralist anthropology of Claude Lévi-Strauss and Marshall Shalins.[37] Each period or society either acts under a regime of historicity or reacts to it, although these structures are only discernible by comparing the different regimes of periods and peoples. In this structuralist mode, regimes of historicity are not so much categories that organise human experiences, but rather are the structures that determine the modalities of those experiences.[38] In other words, the many different ways in which time can be experienced are produced and organised by the relationship between different structures

---

36  The English translation was published ten years later in 2015.
37  Hartog, *Regimes of Historicity*, 8.
38  Hartog, 9.

of historicity. The modern regime of historicity—understood as having an open future, a past radically different from the present, and instilled with a sense of development—has reigned for two centuries, yet during that time has produced a plurality of histories, experiences, and meanings.

By 2005, however, Hartog wondered whether the modern regime of historicity was still in place or was gradually replaced by a new regime. The past, Hartog complained, no longer seemed fundamentally removed from the present. After the 1970s, the idea of history was slowly usurped by an idea of memory. The past was constantly brought into the present through monuments, heritage, and remembrance ceremonies, demanding that the past account for its wrongdoings, instilling notions of civilisation and humanity, or simply to become lucrative tourist attractions. The efforts by marginalised groups to write their own histories back into national histories went, according to Hartog, hand in hand with identarian commemorations and neoliberalism.[39] The effect of this cultural shift was that the past could no longer be conceived of as removed from the present. It lost its independence, becoming only meaningful in relation to the present.

The inability of the past to become past was only one side of the coin. The future seemed to have lost its radical alterity from the present. The current discourse on the future has being swayed by notions of "risk" and "sustainability". In Hartog's argument, the notion of sustainability conceptualised the environment as heritage; to preserve it for future generations to enjoy. Likewise, the idea of risk does not conceptualise the future as a horizon on which hopes and dreams can be projected, but rather as something to be conquered; to manage future risk so calamity will not surprise us.[40] Hartog analysed this disappearance of the alterity of past and future in terms of the collapse of the difference between the space of experience and the horizon of expectation. With essentially no difference between the two, only the present remains as the prevailing dimension of time. This predicament Hartog called *presentism*, and he suggested that it might form a new regime of historicity. Hartog was not alone in this assessment, as the literary theorist Hans Ulrich Gumbrecht, for example, spoke about a similar phenomenon as "a new chronotope of the broad present".[41]

Ever since Hartog launched the notion of presentism, it has been the

---

39 Hartog, 107–14; cf. Daniel T. Rodgers, *Age of Fracture* (Cambridge, MA: Harvard University Press, 2011).

40 Hartog, *Regimes of Historicity*, 189–204.

41 Hans Ulrich Gumbrecht, *Our Broad Present: Time and Contemporary Culture* (New York: Columbia University Press, 2014), xii.

subject of criticism by philosophers, historians, and cultural scholars.[42] One recurrent point of criticism is that, rather than a negative development, that which Hartog describes as problematic—namely, the waning of the modern regime of historicity—might actually be a positive development, or at least an opportunity to reflect more broadly on historicity, especially in relation to power. The dominant regime of historicity often stood in the ideological service of nationalism, erasing the identities and cultures of minorities, or driving them to the margins. Johannes Fabian has famously argued that the modern concept of history made the othering of peoples and societies possible, as "non-Western peoples" were considered to be without history. The ideas of modernity, progress, and development made hierarchies between peoples possible and formed the ideological justification of imperialism.[43]

To an extent, cultural scholars and memory studies have welcomed presentism, as from the late 1960s onwards, the fragmentation of national culture opened up a space in which different experiences and histories could escape the maw of the modern order of time.[44] The presentism of memory culture, in this interpretation, allows a plurality of voices from the past to be heard. Aleida Assmann, who in her recent book *Is Time Out of Joint?* (2013) carefully weighs the arguments in favour and against the idea of memory, concludes that memory is often in service of the emancipation of minorities in society. However, Assmann argues, actualising the wrongdoings and traumas of the past in the present does not foreclose the future. Rather, it opens a future with a promise of emancipation and reparations—a therapeutic process, an overcoming.[45] In other words, presentism does not deny a historical narrative.

Such a view has, apart from its moral implications, profound theoretical implications. In their recent book *Time and Power: Temporalities in Conflict*

---

42  See, for example, the contributions to: Marek Tamm and Laurent Olivier, eds., *Rethinking Historical Time: New Approaches to Presentism* (London: Bloomsbury Academic, 2019).

43  Johannes Fabian, *Time and the Other: How Anthropology Makes Its Object* (New York: Columbia University Press, 1983), 25–33.

44  See for example: Victoria Fareld, "Coming to Terms with the Present Exploring the Chrononormativity of Historical Time," in *Rethinking Historical Time: New Approaches to Presentism*, ed. Marek Tamm and Laurent Olivier (London: Bloomsbury Academic, 2019), 57–70.

45  Aleida Assmann, *Is Time out of Joint?: On the Rise and Fall of the Modern Time Regime*, trans. Sarah Clift (Ithaca: Cornell University Press, 2020), 212–17; See also: Berber Bevernage, "The Past Is Evil/Evil Is Past: On Retrospective Politics, Philosophy of History, and Temporal Manichaeism," *History and Theory* 54, no. 3 (2015): 333–52, https://doi.org/10.1111/hith.10763.

*and the Making of History* (2020), Dan Edelstein, Stefanos Geroulanos, and Natasha Wheatley argue that if indeed the modern regime of historicity is disappearing, a whole new conception of history will emerge. Gone is the reference to one large stream of historical progress. Instead, the past is made up of multiple interacting and conflicting experiences of time bound to different peoples, classes, social spheres, and institutions. In contrast to Koselleck, who thought that history (in the singular) consisted of different layers of time experiences stacked on top of each other like sediments in the earth, Edelstein, Geroulanos, and Wheatley argue that experiences of time are "at once competitive, conflictual, cooperative, unstable, and sometimes even anarchic".[46] Analogous to the ecological term "biocenosis" (biological communities), they call these clashes, struggles, and co-operations *chronocenosis.*

If there is, or was, a regime of historicity, as Edelstein et al. seem to suggest, it can only be the product of a struggle between, or the cooperation of, different temporalities in which one specific temporality can establish itself as dominant. Moreover, they write: "[I]n the crisscross of different, often contemporaneous pasts and predictions (ecological, social, anthropological, familial), what we usually call 'the present' is merely a fragile consensus, a silenced clash."[47] The "present" in this sense is a contemporaneity, a shared or overlapping experience of time. That a society shares the same temporality cannot be assumed beforehand.

This is a radical new vision of historicity and one can wonder whether the enthusiasts of the disappearance of the modern time regime actually grasp the full implication of this disappearance. Simon, in another recent contribution to the presentism literature, argues that this is not the case. Consequently, he presents an alternative philosophy of history that can deal with the waning regime of historicity.[48] When taken seriously, Simon argues, presentism, "the broad present", memory culture, or chronocenosis imply that past, present, and future cannot be related to each other in terms of a development—taken here in the broadest sense, from macro-sociological developments (rationalisation, secularisation, etc), to individual development (towards freedom, happiness, humanity), or scientific development (entropy, evolution). That is to say, history is no longer driven forwards by processes that continuously move towards new stadia. Rather than providing an al-

---

46 Dan Edelstein, Stefanos Geroulanos, and Natasha Wheatley, "Chronocenosis: An Introduction to Power and Time," in *Power and Time: Temporalities in Conflict and the Making of History* (Chicago: University of Chicago Press, 2020), 27.

47 Edelstein, Geroulanos, and Wheatley, 27.

48 Simon, *Unprecedented Change*, 6.

ternative mode of connecting past, present, and future, most philosophies of history and historiography seem content with the absence of such a relation, which can only be experienced indirectly or in a sublime manner.[49] However, this does not mean that the future and past disappear, as Hartog thinks, but rather that they appear as unprecedented and unconnected to events that happened earlier. Without the past gaining meaning through its connection with a historical development, a new mode of historicity becomes dominant—one in which every instance of the past becomes a (social) construct, as is the case in the account offered by Edelstein et al. It is still part of a process, but now one that can drastically alter and is not connected to the present through a development towards something new, but by continued underlying (power) structures.[50] Consequently, both the future and the past arrive unannounced. If such a history has a meaning, it is not one of progress, but rather of a promise of emancipation and the coming of a radical new (revolutionary) subject—a subject that is perhaps no longer human.[51]

In this onslaught of high theoretic violence, I would like to take a step back and place the hefty philosophical implications of presentism as sketched by Assmann, Simon, Edelstein, Geroulanos, and Wheatley between brackets and return to them in the conclusion. Moreover, I want to leave the questions concerning presentism (Can we characterise our current times in terms of presentism? Is it a new regime of historicity? Is it lamentable or emancipatory?) open for the moment. I will address presentism in relation to planning in the sixth chapter and will further attempt to answer the question of presentism in the conclusion. For now, I only want to adopt Hartog's notion of "regimes of historicity". The reason that I chose regimes of historicity over chronocenosis, chronotope, or the constructed past, is that Hartog's notion functions both as a macro and as a micro concept. As Hartog writes:

> It can help us understand the biography of an ordinary person or equally of a historical figure like Napoleon, caught between the modern regime introduced by the Revolution and the old regime symbolized by the Em-

---

49 Simon, 48–49. Here Simon references the works by Eelco Runia and Frank Ankersmit. Especially the latter has worked out a theory in which the past is opened up through sublime experiences of terror and beauty. See: Eelco Runia, "Presence," *History and Theory* 45, no. 1 (2006): 1–29, https://doi.org/10.1111/j.1468-2303.2006.00346.x; F. R. Ankersmit, *Sublime Historical Experience*, 1st edition (Stanford, CA: Stanford University Press, 2005).

50 Simon, *Unprecedented Change*, 15–16.

51 Simon, 183–90.

pire and his marriage to Marie Louise of Austria.[52]

In a micro sense, regimes help us to understand how individuals or groups react, resist, or adhere to a dominant conception of historicity. In a macro sense, they help us to understand how a constellation of experiences of time are ordered in accordance with a regime of historicity.[53] It makes regimes of historicity into a flexible tool. Given its underpinnings in comparative anthropology, rather than phenomenology or philosophical anthropology, it is better suited to account for the plurality of temporalities and historical changes in historicity than Koselleck's framework. Also, as I will explain in the seventh section, I do not wish to dispose of the idea of development, as Simon's proposal of a constructed past implies.

## 1.4 Boundary Practices and the Intangible State

The modern regime of historicity and the rise of the modern state have been intimately connected, at least in the German historical tradition.[54] The historical development of society often served as the justification for the state, or the state was itself imagined as a historical living entity that grew and developed over historical time. The state was also thought to stand partly outside of historical time as a quasi-transcendental entity—it could be the announcer and enforcer of historical change, a "platform for launching plans for a better future", in Scott's terms. More radically, as Friedrich Engels predicted, an entity that would withering away, replaced by the true actors of history.[55]

However, this self-evident relation between the state and history disappeared around the turn of the 19th century, and the state has seldom featured in theoretical discussions of historical time ever since. In a contemporary context, the state, with its quasi-transcendental status, is now seen as a notorious and elusive entity. It looms large in our political culture as a symbol, but is hard to express in more concrete historical terms. Deep suspicion has

---

52  Hartog, *Regimes of Historicity*, xviii.

53  This is akin to how scientific knowledge is ordered (like in the work of Michel Foucault, for example) by discourse rules or an épistémè.

54  Christopher Clark, *Time and Power: Visions of History in German Politics, From the Thirty Years' War to the Third Reich* (Princeton, NJ: Princeton University Press, 2019), 167–70.

55  Friedrich Engels, *Anti-Dühring* (London: Wellred, 2017), part. 2. chapter 3.

emerged whether the motley collection of institutions and organisation that we call the state is not too diffuse for a coherent definition, or that such a definition would always hide its problematic nature. Consequently, in the 20th century, many scholars have tried to banish the notion of the state altogether.

However, in this section, I will argue that sticking with the notion of the state has added value in terms of a viable research framework (in the conclusion, I will argue that it also has added value in terms of political theory). Rather than seeing its elusiveness as a problem, I will take it as a starting point for investigating the state in relation to historicity and planning. Planning plays an important role in giving more concrete form to the power of the state in a historical manner. To make this point, I will first discuss how Koselleck has addressed this matter. Afterwards, I will turn to another important theory of the state of the 20th century that dominates in the US political sciences, illustrating again the elusiveness of the state. The problems of this approach will be addressed by discussing Timothy Mitchell's alternative, whose theory also form the basis of my own approach.

As he was, first and foremost, a historian, the question of how the state and historicity relate in the modern conceptions and practices of prognosis and planning is not directly addressed by Koselleck in political theoretical terms. He does, however, discuss the work of the 19th-century scholar Lorenz von Stein, who did address the issue. It is Koselleck's implicit suggestion that much of the interplay in this issue can be understood through the work of Stein. According to Koselleck, writing in the middle of the 19th century, Stein had understood the practice of prognosis as equally necessary and impossible in the face of a radically uncertain future that the age of revolution ushered in. Consequently, he pleaded for a social science that could uncover the long-term formal structures that could form the basis of a new form of prognosis, escaping the inherent tension in the older form between stability and instability.[56] Koselleck strongly hints that economic planning in the 20th century could more or less follow the principles laid out by Stein for a social science of the future. As such, his remarks on prognosis are of interest to the history of planning.

Stein was a student of Georg Friedrich Wilhelm Hegel and his thought bears the typical marks of the historical thinking associated with his teacher, which cast such a long shadow over German traditions of law, history, so-

---

56 Reinhart Koselleck, "Historical Prognosis in Lorenz von Stein's Essay on the Prussian Constitution," in *Futures Past: On the Semantics of Historical Time*, trans. Keith Tribe (New York: Columbia University Press, 2004), 64.

ciology, and economics.[57] Like Hegel, Stein considered the emergence of the state in terms of a historical process in which the previous social organ, the *Societas Civilis,* was split in two, resulting in a state and a society. Likewise, his conception of the state was organicist: The state formed a whole, unifying different parts of society, but was also dependent on the functions of its parts to survive and develop to its full potential. Hence, the state and society were separate, yet could not exist without each other: Whole and part were intrinsically linked in a reciprocal relationship. The unity of the state was, therefore, not given, but rather dependent on the activity of the state that bonded its societal parts together: its laws, customs, and political representatives.[58]

However, unlike Hegel, Stein believed that the forces bifurcating state and society could also undermine the unity of the state by further dividing society into unequal social classes or transforming the state into the bastion of power-hungry bureaucratic elites.[59] Stein's own native Prussia was a powerful case in point. In 1852, considering the question if and how Prussia should implement a constitution and parliament, Stein noted that Prussia lacked a shared language, ethnicity, religion, or law. Therefore, if the state had to unify Prussia, it had very little to go on. What it did have, however, was an economic unity. Through a series of labour and trade laws from the first half of the 19th century, each inhabitant of the Prussian territories could participate in the same economic life. This was, however, too little if the Prussian state wanted to have a constitution and a parliament. Such institutional arrangements would require a civil society, but the formation of a *bürgertum* (bourgeoisie) was halted by the might of the old Junker class and the deprivation of the working class. Therefore, Stein argued, Prussia needed to develop economic and social policies for the more equal distribution of power and wealth if it wanted to form a liberal representative democracy.[60]

In his plea for an early form of the welfare state, Stein took the promises of democracy from the unstable and unknowable future, opened up by the revolutionary energy of 1848, and provided a knowable structure in which

---

57  See for example: Frederick C. Beiser, *After Hegel: German Philosophy, 1840—1900* (Oxford: Oxford University Press, 2014).

58  Michael Wolff, "Hegel's Organicist Theory of the State: On the Concept and Method of Hegel's 'Science of the State,'" in *Hegel on Ethics and Politics*, ed. Nicholas Walker, Otfried Höffe, and Robert B. Pippin, The German Philosophical Tradition (Cambridge, UK: Cambridge University Press, 2004), 291–322, https://doi.org/10.1017/CBO9780511498176.013.

59  Michael Sonenscher, "Krausism and Its Legacy," *Global Intellectual History* 5, no. 1 (2019): 11, https://doi.org/10.1080/23801883.2019.1586787.

60  Koselleck, "Historical Prognosis," 61.

this future promise could become a stable institution. The institution that could establish this stable framework for the future was the state, or to be more precise, the activity of the state in forming society. The state needed to give shape to a civil society, whilst at the same time, the state could only function if there was a strong civil society that applied checks and balances to the state. Otherwise, it would become a bureaucratic mess. Stein's prognosis was therefore based on a theory of the activities of the state, which was in turn based on historical research of the development of society—in particular social movements in France, about which he wrote his main work.[61] These activities of the state, its making of economic law and its social-economic policies, were both what unified the customs of society, and what bound the person of the state, as Stein called it, together.[62] In this theory, the state was fundamentally understood in a historical manner: The activities of the state were forward-looking, hoping to establish a stable framework in which the functions of society could develop with the state, in turn becoming more democratic and more liberal.

What is of relevance here to the discussion of planning is that Stein grasped that the essence of a state was not dependent on a unifying factor in society—be it culture or language—nor did it rest on a central place of rule, such as the government or parliament. Rather, its defining trait was a process: The essence of the state was dependent on its actions. If the state was to understand itself through a scientific theory, such a theory of state action would also determine the identity of the state. Moreover, Stein sketched how prognosis could synthesise the *ideal content* of the state as the harbinger of a democratic society, realising mankind's full potential freedom through the *concrete substance* of administrative practices of the state—that is, the making and enforcing of laws (another staple of Hegelian thought).[63] Such a synthesis was a bringing together of the state's ideal content and concrete substance into a temporal dimension. In other words, prognosis formed a framework in which past, present, and future could be connected, thus es-

---

61 Diana Siclovan, "Lorenz Stein and German Socialism 1835—1872", PhD thesis (University of Cambridge, 2014), chap. 3.
62 Sonenscher, "Krausism and Its Legacy," 11. For the idea of the state as a person in German thought, see: David Runciman, *Pluralism and the Personality of the State*, Ideas in Context (Cambridge, UK: Cambridge University Press, 1997), chap. 3, https://doi.org/10.1017/CBO9780511582967.
63 Georg Wilhelm Fredrich Hegel, *Hegel: Elements of the Philosophy of Right*, ed. Allen W. Wood, trans. H. B. Nisbet, Cambridge Texts in the History of Political Thought (Cambridge, UK: Cambridge University Press, 1991), https://doi.org/10.1017/CBO9780511808012.

tablishing historical meaning under the historicity of the development of the state, whilst simultaneously giving shape to the person of the state by connecting its ideal and concrete aspects.

However, from the beginning of the 20th century onwards, the organicist conception of the state went out of fashion.[64] After the Second World War, the preferred mode of representation in the political sciences made no sharp distinctions between state and society, but rather projected both into larger computer-inspired dynamic systems (this epistemic development will be discussed in more detail in the third and fourth chapters). Consequently, the emphasis in the theory of the state was placed on its administrative apparatus and unusual concentration of power, but did not differ fundamentally from other concentrations of power.[65] As a result, the ideal content of the state—its function, its promises for the future, and its power as a symbol—was no longer bound to a historical development. Instead, political scientists thought that the functioning of democracy could be explained by focusing on the dynamics of smaller concentrations of power in wider society, such as interest groups, corporations, education, news media, civic culture, and public opinion. In their democratic ideal, the state was only the go-between for different voices, opinions, and interests, ensuring that the wishes and demands of society could be transformed into effective policy—in other words, a neutral framework sitting between interests and policy.

A reaction against the absence of a clearly defined state in political science emerged towards the end of the 1970s. Under the slogan "bringing the state back in", authors such as Eric Nordlinger, Stephen Krasner, and Theda Skocpol argued that the dynamics of smaller organisations in society could not explain how and why a nation moved in a specific political direction. There was a large unknown force distorting society's views, opinions, and interests when they became policy. This unknown was, of course, the state, which was no longer seen as a mediator of society, but as an organisation with its own interests and views.[66] Yet without a clear distinction between state and society, Nordlinger, Krasner, and Skocpol approached the study of the state as an organisation, focussing on the role of policymakers within the state organisation. The interests and views of the state were consequently

---

64 Runciman, *Pluralism and the Personality of the State*, chap. 10.
65 David Ciepley, *Liberalism in the Shadow of Totalitarianism* (Cambridge, MA: Harvard University Press, 2006), 183–228.
66 Stephen D. Krasner, "Approaches to the State: Alternative Conceptions and Historical Dynamics," *Comparative Politics* 16, no. 2 (1984): 223–46, https://doi.org/10.2307/421608.

those of the policymakers. Studying the state meant understanding how the views of policymakers were formed and how this in turn informed the decisions they made.[67]

There remains, however, something deeply unsatisfactory about the "bringing the state back in" approach. A danger remains that the state is reduced to the subjective preferences of one specific group in society. Nor is it explained how the state organisation retains its central position in society, especially when compared to other powerful organisations, such as multinationals. Moreover, Skocpol, Nordlinger, and Krasner fail to explain how policymakers retained their relative autonomous position in society. These questions would have been more easily answered by looking at the symbolic function of the state. However, by focussing on the decisions of policymakers, the ideal content of the state was only addressed indirectly, the ideal content solely confined to the conceptual schemes of policymakers. Consequently, the temporal dimension of the state is under-theorised in their work. How the organisation of the state has changed over time, or how the state shapes expectations of the future, can only be attributed to factors laying outside of their theory.

In reaction to these shortcomings, Mitchell formulated an alternative approach to the state in the late 1980s.[68] Instead of returning to the naturalness of the state of the 19th century, Mitchell shared a lot of the post-war scepticism of the ideal or ideological construct of the state. In his view, there was no stable identity of the state, nor of civil society, that allowed for a clear-cut definition of the state. Instead, Mitchell took an established concept from sociology, *boundary work*, to show that the boundaries between state and society were constantly re-drawn, using novel techniques in novel manners.[69] The study of boundary work is the study of how actors define themselves as a group, not by adhering to a common identity, but by designating the boundaries of so-called "ingroups" and "outgroups". Drawing the boundary is thus seen as a practice that co-constitutes both the ingroup and the outgroup. The study of boundary work has shown that practices specific to a group seemingly unrelated to group identity often serve a double function as

---

67 Peter B. Evans, Dietrich Rueschemeyer, and Theda Skocpol, eds., *Bringing the State Back In* (Cambridge, UK: Cambridge University Press, 1985).

68 Timothy Mitchell, "The Limits of the State: Beyond Statist Approaches and Their Critics," *American Political Science Review* 85, no. 1 (March 1991): 77–96, https://doi.org/10.1017/S0003055400271451.

69 Thomas F. Gieryn, "Boundary-work and the Demarcation of Science from Non-Science: Strains and Interests in Professional Ideologies of Scientists," *American Sociological Review* 48, no. 6 (1983): 781–95, https://doi.org/10.2307/2095325.

a boundary practice. Scientific methodology, for example, helps the scientist to generate knowledge claims about reality, but it is also a tool to discern ingroups from outgroup: "Those who do not adhere to our methodology are not real scientists."

According to Mitchell, central to the practices of the state is that they have a double function in drawing the boundary between state (ingroup) and society (the outgroup). By making certain interventions or subjecting something to its rules, the practices of the state make a claim about what is part of the state, whilst when the state abstains from acting, or actively places actors outside of the law, the state designates what is not part of itself. The banking system is a good example of this. Privately owned banks can only function within an international system of central banks; they are subjected to specific laws and have to comply when central banks change exchange rates. The boundary in the banking system, where the state ends and society (or the market) begins, is thus rather murky. Therefore, in its financial actions, the state has to constantly find ways to designate boundaries between private and public actors. One such action is the issuing of state bonds. If there was no clear demarcation between state and market, state bounds would be simply shifting around a sum of money on a balance sheet. However, in the transaction of state bonds, the state clearly establishes roles that the state and private actors can perform by adhering to a market model: making one party the supplier and one party the buyer. There is thus little confusion about where the boundary is in such a transfer.

By focussing on boundary work, Mitchell is able to address both the ideal content of the state and its concrete substance: The state uses symbols, ideas, and promises to demarcate its boundaries. For example, in issuing state bonds, the state essentially makes a promise to return funds in the future, and the state is a permeant entity in this promise. The functioning of the concrete administrative practices of the state is thus dependent on its ideal content. Conversely, and borrowing Michel Foucault's notion of disciplinary practice (on which more in section 1.8), Mitchell argues that administrative practices are also internalised by those subjected to them. The symbolic power of the state is therefore an object of its internalised authority projected outwards through specific symbols.[70] In Mitchell's framework, the ideal content and the concrete substance of the state are thus co-dependent. Given that the ideal content is dependent on local practices, it is inherently unstable and changes over time. In this manner, it becomes once again pos-

---

70 Mitchell, "The Limits of the State," 93.

sible to plot the state on a temporal axis.

My argument is that social and economic planning should essentially be understood as a boundary practice. In designating what can and cannot be imposed in civil society and the economy, planning also reiterates what is essential to the powers of the state (for example, its permanence)—what is part of the state and what is part of society. Following Koselleck's argument, planning does so in a fundamentally historical manner, oriented towards the future. Comparable to Stein's conception of the state and prognosis, I will argue that it is the practice of planning rather than the state that provides a framework for the future, both in the ideal sense and in practice. Yet, by providing this framework for the present and future, planning designates its actions as actions of the state and these actions, in turn, determine what the state is. In that sense, planning can be understood, as Stein would have wanted it, as a theory of state actions that bring together the state's ideal content and concrete substance.

## 1.5 The Decisionist Imagination

In his critique of the theory of the state provided by Nordlinger, Krasner, and Skocpol, Mitchell berates the focus of the political sciences on decision making. Understanding the state completely in terms of power(ful) decisions or the decisions of policymakers misses the point of what that power consists of in the first place—which, according to Mitchell, are disciplinary and boundary practices. Mitchell is right in pointing out that the decisions that make up the state are largely illusionary or imagined—more part of the symbolic nature of the state than of its actual substance. However, its illusionary nature does not diminish the importance of how state decisions are imagined. An image of a state decision works like a family portrait: It tells us who is and is not part of the family, and on what symbols the power of the family rests. Likewise, images of state decisions instruct who is supposedly taking the decision, how, and by what power. It is itself an expression of symbolic power. However, rather than considering the decision imaginary as the symbolic result of a disciplinary practise—as Mitchell does—it should be taken as a technique that creates a state effect. As I will show later on, by ordering options and consequences, the decision image is instrumental in exploring future possibilities. Therefore, foregoing a focus on decisions, as Mitchell does, seems unwise.

As politicians and ministers like to imagine themselves to be in con-

trol—that they take clear decisions and state actions do not follow from the muddling of bureaucrats—it is important to ask: Who makes the images of state decisions? My argument is that socio-economic planning constitutes one of the most prominent creators of decision images in modern politics. Consequently, it is important to investigate how planners imagine decisions, and by which techniques and what underlying theory.

In recent years, historians of science have argued that the definition of the concept "decision" that was so central to US political science was strongly influenced by German scholarship from the interwar period. In a recent edited volume, entitled *The Decisionist Imagination* (2019), Daniel Bessner and Nicolas Guilhot argue that political science was especially influenced by a doctrine called *decisionism,* commonly associated with the thinking of Carl Schmitt and Max Weber, but in a broader interpretation also applicable, amongst others, to left-wing legal scholars such as Franz Neumann and Hermann Heller.[71] This doctrine, via German emigrates fleeing the Nazi regime, also influenced post-war planning theories in the United States. This latter point is remarkable, since most decisionist thinkers were fierce critics of planning. It is informative to trace this intellectual linage in order to understand the theoretic basis of how planning imagines decision. Discussing these oppositions and affinities between decisionism and planning will shed light on the relationship between planning, the concept of the decision, and the state.

The most famous proponent of decisionist thought is Schmitt, a (very) controversial yet influential figure, often nicknamed "the crown-jurist of the Third Reich" for his close associations with the Nazi Party (NSDAP).[72] Recent commentators, however, have pointed out that decisionism was not central to Schmitt's overall political theory, and it was rather its reception in the United States that made it central.[73] However, since I am here primarily interested in how decisionism influenced the Western planning tradition, I

---

71 Daniel Bessner and Nicolas Guilhot, "Who Decides?," in *The Decisionist Imagination: Sovereignty, Social Science, and Democracy in the 20th Century*, ed. Daniel Bressner and Nicolas Guilhot (New York: Berghahn Books, 2019), 1–25.

72 See: Jan-Werner Müller, *A Dangerous Mind: Carl Schmitt in Post-War European Thought* (New Haven, CT: Yale University Press, 2003); Duncan Kelly, *The State of the Political: Conceptions of Politics and the State in the Thought of Max Weber, Carl Schmitt, and Franz Neumann*, *The State of the Political* (Oxford: Oxford University Press, 2012).

73 For an overview of Schmitt's reception history in the English-speaking world, see: Joshua Smeltzer, "Carl Schmitt's Historicity between Theology and Technology", PhD thesis, (University of Cambridge, 2020), 1–28, https://doi.org/10.17863/CAM.52240.

follow this particular reception history.

Schmitt ultimately understood the state as the normative order in society—an order that rested on the decisions of the sovereign. The sovereign stood partly outside of the normative order, as the decision that could establish a normative order could itself not be based on that normative order, or any overreaching order. This was, according to Schmitt, a question of who belonged to the normative order—a question of who were friends and who were enemies, between an ingroup and an outgroup. The concept of the decision in Schmitt's thought was thus fundamental: It brought the normative order into existence, and its maker as sovereign was not bound to the authority of anyone or anything else.[74] Schmitt's conception of sovereignty was closely tied to another of his theoretical conceptions, namely, *the political*. With the idea of the political, Schmitt sought to give politics its proper domain—that is to say, what set politics apart from other spheres of human activity, such as the economy, ethics, or science.[75] Considering this question from a historical angle, Schmitt argued that politics in modernity, especially in liberalism, was conducted on the basis of extra-political principles. For example, humanists adhered to ideas of universal natural rights, whilst liberals invoked ideas of *doux commerce* for a world order of peace and prosperity. Consequently, Schmitt feared that politics lost its locality and disposed of the idea of sovereignty. Political decisions, concerned with a nation-specific normative order and ultimately dependent on the sovereign, were usurped by larger normative principles. As such, there was a danger of the disappearance of the political from politics.[76]

With the advent of technocracy and socialism (which Schmitt largely took as a subset of technocracy), politics—that is, the legitimacy of the normative order and the ruler—started to primarily revolve around questions of productivity. To put it simply, how could productivity be boosted and how could all peoples share in the fruits of this increased productivity? For

---

74 Carl Schmitt, *Political Theology: Four Chapters on the Concept of Sovereignty*, trans. George Schwab (Cambridge, MA: MIT Press, 1985), 5; Nehal Bhuta, "The Mystery of the State: State Concept, State Theory and State Making in Schmitt and Oakeshott," in *Law, Liberty and State: Oakeshott, Hayek and Schmitt on the Rule of Law*, ed. David Dyzenhaus and Thomas Poole (Cambridge, UK: Cambridge University Press, 2015), 10–37, https://doi.org/10.1017/CBO9781316144930.002.

75 Carl Schmitt, *The Concept of the Political*, trans. George Schwab, Enlarged edition (Chicago: The University of Chicago Press, 2007), 26.

76 Carl Schmitt, "The Age of Neutralization and Depolitization," in *The Concept of the Political*, trans. George Schwab (Chicago: The University of Chicago Press, 2007), 80–96.

Schmitt, this turned the most pertinent question of the modern age into a technical one, namely, the use of technological innovation for increased productivity.[77] In addition, I would add, economic planning turned the distribution of wealth similarly into a question of innovative distribution mechanisms. By turning the political question into a technical one, the opposition between an "ingroup" and "outgroup" was neutralised. Instead the issue of how to apply technology and increased productivity became dependent on individual ethical convictions, such as those of humanitarian values. The normative order was transposed from a question of the state to the "kingdom of conscience", no longer corresponding to an earthly location. In that sense, technocracy undid the importance of the decisions of the sovereign, weighing instead the decision of each individual with equal political importance.[78]

Since Schmitt applied his political theory to provide a legal justification for many Nazi policies, and above all because of the deeply conservative, authoritarian, and racist nature of his political thinking, decisionism is sometimes understood as part of a fascist ideology.[79] Such an assessment, however, misses some crucial points. The core of decisionism—that political decisions bring forth normative orders; that these decisions cannot be determined by other normative orders; and that the decision has existential priority over the normative order—could be found amongst a wide-ranging set of ideological thinkers. One example from the other end of the political spectrum was the legal scholar and social democrat Herman Heller.

Similar to Schmitt, Heller considered the core of politics to be a clash of different political collectives. Different from Schmitt, however, this was a clash of ideologies, not of friends and enemies. Moreover, like Schmitt, Heller believed that political decisions could not solely be based on legal-normative principles or technology—here they both argued against the influential legal scholar Hans Kelsen.[80] However, where Schmitt argued that the state was dependent on the decision of the sovereign, Heller argued the opposite: that it was the state that was a precondition for the political decision. For

---

77  Schmitt, 84–85.

78  Carl Schmitt, *The Nomos of the Earth: In the International Law of the Jus Publicum Europaeum*, trans. Gary Ulmen (New York: Telos Press, 2003), 324–35; Smeltzer, "Carl Schmitt's Historicity," 125–32.

79  For example: David Ohana, "Carl Schmitt's Legal Fascism," *Politics, Religion & Ideology* 20, no. 3 (July 3, 2019): 273–300, https://doi.org/10.1080/21567689.2019.1656073.

80  David Dyzenhaus, *Legality and Legitimacy: Carl Schmitt, Hans Kelsen and Hermann Heller in Weimar* (Oxford: Oxford University Press, 1999), chap. 3.

Heller, the state's decision was that which lies between the just and unjust order within society. The goal of such a decision, however, was not to establish a normative order for the whole of society, but rather to provide the grounds upon which political conflicts and co-operation within society were possible without reverting to violence or outright war. Hence, the making of the decision between the just and the unjust is subsequently dependent on the political collaborations and clashes within society. The state provides the common ground that makes such co-operation possible by expelling violence and war. The decisions of the state make politics possible, whilst at the same time, politics can also remake the decisions of the state. The expelling by the state of certain practices (such as violence) is based on a normative order within society itself—an order formed by political decisions reached in cooperation.[81]

In contrast to Schmitt, Heller places the essence of politics not in a specific location—as Schmitt does with the state—but rather on a temporal dimension. As Anthoula Malkopoulou has argued in a recent article, Heller's politics play out in a constant making and remaking of the decisions of the state on which the rule of law is based: the *Rechtsstaat*.[82] Given this temporal dimension, it is all the more surprising that Heller rejected planning as a legitimate politics of the future. According to Heller, if political decisions within society were relegated to the level of planning, cooperation would turn into coordination, emptying the political decision-making process of its legalising and normalising potential. In other words, if planning were to take a front seat in political matters, the possibility that political action within society could change the decision of the state on what was considered just and unjust disappeared.[83] Planning would turn the current state order into a permanent one. Schmitt and Heller thus placed their decisionist thinking in opposition to technocracy, in which the latter was associated with planning. As I will discuss in the fourth chapter, it was this same framework that Jürgen Habermas used when he decried economic planning as technocratic, even when he distanced himself from decisionism.[84]

---

81 Anthoula Malkopoulou, "Hermann Heller on Politics: Discipline, Sphere and Activity," *History of European Ideas* 46, no. 4 (May 18, 2020): 393–404, https://doi.org/10.1080/01916599.2020.1738773.

82 Malkopoulou, 389. The notion of "*Rechtsstaat*" is difficult to render in English. It denotes both the rule of law, liberal democracy, and the constitutional foundation of the state.

83 Malkopoulou, 401.

84 Ellen Kennedy, "Carl Schmitt and the Frankfurt School," *Telos* 1987, no. 71 (March 20, 1987): 37–66, https://doi.org/10.3817/0387071037; Matthew G. Specter,

None of the legal scholars discussed above cited the work of an actual economic planner to make their point. Instead, they appealed to a larger idea of the ideology of technology and its inherent danger. As a result, they severely misrepresented what planners were actually up to in the interwar period. As I will show in the second chapter, a number of prominent planners tried to account for the criticism that planning was at odds with the essence of politics.[85] To this end, they attempted to account for political decisions in their planning theories—how these differed from planning decisions and how the two related. In these attempts they made the claim that they left space in their planning theories in which politics could occupy its proper domain, thus preventing the colonialisation of the sphere of politics by technology. Consequently, in their imagining of the political decision, they produced a picture not all that different from their harsh decisionist critics, such as Schmitt and Heller. In that sense, planning also had a decisionist imagination.

This affinity between planning and decisionist thinking became especially salient after the Second World War, when US political science adapted both the ideas of German intellectual refugees and the coordination techniques developed by planners during the Second World War, such as game theory, operation research, and cybernetics.[86] As I will argue in the third chapter, such a fusion of decisionist thinking and planning also happened in the Netherlands within the vestiges of the Dutch Central Planning Bureau (CPB).

To be perfectly clear, I do not take decisionism as a neutral description of politics. Other forms of politics are imaginable that do not revolve around decisions, even in liberal democracy. As will become clear over the course of this thesis, however, the German interwar image of the political decision had proven so successful that it has become an inherent part of our current thinking about politics. The numerous applications of the concept in polit-

---

"What's 'Left' in Schmitt?: From Aversion to Appropriation in Contemporary Political Theory," in *The Oxford Handbook of Carl Schmitt*, ed. Jens Meierhenrich and Oliver Simons (Oxford: Oxford University Press, 2017), 426–55.

85  For example: Otto Neurath, "Visual Education: Humanisation versus Popularisation," in *Encyclopedia and Utopia: The Life and Work of Otto Neurath (1882-1945)*, ed. Juha Manninen, Elisabeth Nemeth, and Friedrich Stadler, Vienna Circle Institute Yearbook 4 (Dordrecht: Kluwer, 1996), 245–335.

86  Nicolas Guilhot, "Cyborg Pantocrator: International Relations Theory from Decisionism to Rational Choice," *Journal of the History of Behavioral Sciences* 47, no. 3 (Summer 2011): 279–301, https://doi.org/10.1002/jhbs.20511.

ical science literature evidence this fact.[87] It is therefore obligatory to take it seriously as a concept.

## 1.6 The Decisionist Imaginary

The pretence of planning—to designate politics and instrumental reason to their proper places—was often misleading. By placing political decisions within a planning framework, political choices were framed in a technical manner, even when the questions themselves were not technical. Following a decisionist line of reasoning, by so framing political questions, planning consequently did partially partition the pure normative order of the state. For example, in the 1950s, planners started using so-called decision models to imagine political decisions as economic choices based on utility and preferences, thus turning the political decision into something that could have an optimum outcome (as will be discussed at length in the third chapter). To address this peculiar mixing of politics and technology, in this thesis I speak of the *imaginary* of the decision rather than the imagination. The notion of the *social imaginary* is a staple within sociology discourse, associated with names such as Cornelius Castoriadis, Claude Lefort, Charles Taylor, and Benedict Anderson.[88] Given the technical nature of planning, my use of the notion is modelled after Sheila Jasanoff's application of the notions under the name of *sociotechnical imaginaries*.[89]

A social imaginary is a set of social institutions, values, symbols, techniques, and technologies that are used by the members of a society to imagine their participation in a social whole or community. Through these institutions, individuals are able, not only to imagine how they relate to this social whole, but also their relation to fellow human beings and mutual members within the imagined community. These imagined communities do not only serve to conceptualise larger social wholes, but are also normative in nature and thus serve to imagine what is a legitimate manner of relating

---

87 Bessner and Guilhot, "Who Decides?," 2.

88 Cornelius Castoriadis, *The Imaginary Institution of Society*, trans. Kathleen Blamey (Cambridge, MA: The MIT Press, 1998); Charles Taylor, *Modern Social Imaginaries* (Durham, NC: Duke University Press Books, 2003); Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 1983).

89 Sheila Jasanoff and Sang-Hyun Kim, eds., *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power* (Chicago: University of Chicago Press, 2015).

to a given societal whole, and what is not. In short, they provide the justification for the existence of the whole and the norms that bind the community together. In this sense, imaginaries legitimise the existence of the whole and the function of specific practices related to the community. The most vivid example of such an imaginary is the modern nation state. Symbols such as flags, anthems, holidays, and shared stories help individuals to relate to a nation. Celebrations in the name of the nation justify its existence, yet national symbols can also be used to identify "outsiders", such as ethnic minorities that are not fully part of the social whole.[90] As I will argue in the sixth chapter, Castoriadis' and Claude Lefort's use of the notion was also bound to Schmitt's question of the normative order of the state. For them, social imaginaries were focussed on what I have called the ideal content of the state. Therefore, attaching social imaginaries to state decisions is, from a historical viewpoint, not unusual.

In Jasanoff's use of the term, investigating the imaginaries surrounding a specific form of technology is a way of understanding the political and ethical implications of the technology in question in relation to the social whole—not only in its current manifestation, but also in the future visions and dreams implicated in the technology. Binding the fate of a nation to the progress of technology through the establishment of a national science programme is the most recognisable manifestation of a sociotechnical imaginary.[91] Prominent examples include the development of nuclear power plants by the French government after the Second World War, or John F. Kennedy's appeal to the national space programme to show US superiority against the Soviet Union.[92] In the case of French nuclear power, the nuclear programme was a symbol of the technological advancement of the nation. It signalled the idea that the nation would manifest its destiny through self-sufficiency of energy and that the advancement of the nation was bound up with the advancement of nuclear energy in the future, but also that scien-

---

90 Anderson, *Imagined Communities*, 192–99.
91 Sheila Jasanoff, "Future Imperfect: Science, Technology, and the Imaginations of Modernity," in *Dreamscapes of Modernity Sociotechnical Imaginaries and the Fabrication of Power*, ed. Sheila Jasanoff and Sang-Hyun Kim (Chicago: University of Chicago Press, 2015), 25.
92 For more on these examples: Gabrielle Hecht, *The Radiance of France, New Edition: Nuclear Power and National Identity after World War II* (Cambridge, MA: The MIT Press, 1998); David A. Hounshell, "The Medium Is the Message, or How Context Matters: The Rand Corporation Builds an Economics of Innovation, 1946–1962," in *Systems, Experts, and Computers: The Systems Approach in Management and Engineering, World War II and After*, ed. Agatha C. Hughes and Thomas P. Hughes (Cambridge, MA: The MIT Press, 2000), 255–310.

tists and technicians partaking in the programme were working on a project "for the nation".

What I will refer to as the *decisionist imaginary* functions in much the same way, albeit in a narrower manner. As such, it is best to conceive of the decisionist imaginary as a subset of social imaginaries. In its most minimal definition, it is a set of institutions, values, symbols, techniques, and technologies that are used to create images of political decisions through which individuals can relate in a normative manner to the social whole of the state. In the chapters hereafter, I will elaborate on a "thick description" of the decisionist imaginary.

The theories of Nordlinger, Krasner, and Skocpol can be seen as decisionist imaginaries—here produced by scholarly practice. Their imagining of the decision making of policymakers is a way of picturing a source of power that asserts the state's authority within society. As a scientific theory, their approach makes no pretence of adhering to a normative way in which individuals relate to the state (or not). Yet, the theory has a critical implication. Depending on the policymakers' preferences, and how far these preferences reflect (or not) the preferences of society as a whole, this image either legitimises or delegitimises the decisions of the policymakers and thereby the state as a whole. The image of the state, therefore, also contains its negative in the form of another social whole: (civil) society. "Bringing the state back in" as a scholarly practice is, in Mitchell's terms, also a boundary practice, albeit one that is perhaps not necessarily in service of the state, and therefore capable of creating both state effects and resistance against the state. It should be noted that the images produced within a decisionist imaginary do not necessarily concern the political decisions of the state. In Heller's case, for example, political decisions were made within a society in which the state assumed a background role. I do claim, however, that all political decisions in the decisionist imaginary ultimately relate to the state—consciously or not, the state has remained central to the Western tradition of thinking about politics.[93] Heller's example is a case in point. For him, political decisions ultimately determined the decisions of the state, even if they were a distinct set of decisions.

The focus on theory in the above examples might be misleading. By seeing them as scholarly practices, I want to emphasise that there is a material and institutional component in the production of the decisionist imag-

93 Quentin Skinner, "The Sovereign State: A Genealogy," in *Sovereignty in Fragments: The Past, Present and Future of a Contested Concept*, ed. Hent Kalmo and Quentin Skinner (Cambridge, UK: Cambridge University Press, 2010), 26–46.

inary (more on this matter in the methodology section of this chapter). As
with Jasanoff, I want to focus on image-producing technology. In particular,
I want to investigate the techniques of planning in producing decisionist
imaginaries, especially the mathematical and computer models of the CPB,
and how these techniques created a *heuristics* of decision making. These
planning heuristics were a crucial instrument in understanding who gets to
decide in a given state, on the basis of what authority, and to what effect.
As I explain in the sixth chapter in reference to the works of Lefort, the dis-
tribution of authority is a vital part of the institutionalisation of the social
imaginary into a symbolic order of society (here again the ideal content and
concrete substance of the state are intimately intertwined). It is my thesis
that planning in the Netherlands has tried to imagine the decisions of the
state as bound to democratic legitimation on the one hand, especially in the
form of public opinion, and to scientific expertise on the other. In doing so,
the models of the CPB have a clear normative component: Their heuristics
legitimise decisions of the state as being democratic and based on scientific
authority. This approach consequently goes beyond the denouncement of
planning as undemocratic. As I will show, planning is instrumental in imag-
ining the state as democratic.

The decisionist imaginary also relates to the temporal dimension of
planning. The heuristics it creates are the product of the experiences of time
that it weaves together by linking past, present, and future. The decisionist
imaginary consequently does not only help the individual to relate to the
social whole of the state, but also to the future. It instils a historical sense,
allowing the individual to relate to a regime of historicity. To express it in
quasi-Hegelian terms, in this manner, the decisionist imaginary brings to-
gether the concrete substance of the state (its administrative apparatus) with
its ideal content (the protection and freedom of its citizens).

To give an example from chapter four of this thesis, in the 1970s, the
CPB developed computer models based on the principle of system dynam-
ics as developed by Jay Forrester.[94] These models were intended to be used
by planners, policymakers, and citizens alike to bring decision making on
a societal level and the state in accordance with each other. In this manner,
the models imagined the relationship between state and society, and pro-
vided state decisions with a democratic legitimation in the form of societal
decisions. The intent of the model was to make its users aware of the long-
term problems, such as environmental pollution and depletion of natural re-

---

94  See: Jay W. Forrester, *Industrial Dynamics* (Cambridge, MA: MIT Press, 1961).

courses, that had to be integrated into the decision-making process, making actors aware of the long-term consequences of their actions. It thereby gave actors a framework via which to relate their everyday experiences, on the basis of which they made their decisions, to an expectation of the future and the environmental and energy issues it might present. Future issues were distanced and by addressing the issues of tomorrow, the danger of future events taking the present by surprise was partly neutralised. At the same time, current customs were imagined as highly malleable. If future issues demanded a change in the habits of the actor, planning could facilitate such a change. Although the system dynamics models were never used in Dutch politics as intended, the image of society and state that the model produced served as a legitimation of the social planning discourse that was popular at the time.

To close the discussion of the theoretical framework, I will briefly reiterate it, whilst showing how this framework overcomes the shortcomings of the representing and intervening model I sketched in the first section. Afterwards, I will briefly indicate how this theoretical framework helps to give a more precise definition of the issues that I want to address in this thesis. Planning, I argue, should be understood as a practice that gives shape to the state and its counterpart, civil society, both in its concrete substance and its ideal content, through a decisionist imaginary—that is, by producing images of political decisions. Planning practices do so in a temporal manner; they connect different experiences of time and subject them to a specific regime of historicity. By linking historical events to a larger development—be that the development of capitalism or liberal democracy—a particular narrative is produced in which individuals can act upon the future.

By placing decisions in a temporal dimension, this framework shows how questions of the future are integral to the practice of planning. Giving shape to how decisions are imagined, the historicity of planning has a direct influence on how it imagines the state. Furthermore, the images of decisions produced by planning assists individual micro-actors to relate their activities to the state. Acting as, or on behalf of, the state is, therefore, an act of imagining, of which I argue the decisionist imaginary plays a crucial role. Hence, it differentiates the actions of micro-actors as actions of the state from actions in the name of other social wholes (or acting in general) by way of how actors imagine their actions mediated by concrete entities, such as symbols and technology. Lastly, by imagining decisions as bound to both democratic input and scientific expertise, the decisionist imaginary contains a strong normative core that places planning in the service either of the people (democracy), scientific authority (technocracy), or both. What makes

planning democratic in a normative sense is thus bound to how it produces the decisionist imaginary. As I will argue in this thesis, Dutch planners have always attempted to bind political questions to democratic legitimation. Consequently, planning is not merely authoritarian or technocratic; it can also be a driver of how democracy is imagined within society.

Using this theoretical framework allows me to divide my thesis into periods, with each chapter addressing a different period. Although Koselleck saw his own theorising as a warning against periodisation (there is a degree of irony here, as his notion of *Sattelzeit* has so often functioned as a periodisation for many later authors),[95] paying attention to the shifts in the experience of time allows me to form a typology of different forms of historicity that took shape during the 20th century. Rather than viewing modernity, with its emphasis on a singular experience of time (something Koselleck's theory is prone to do),[96] I discern shifts in the layers of time that have occurred throughout modern times. Even if all of the experiences of time discussed in this chapter fall neatly into the modernist historicity of progress, how this progress was experienced and conceptualised altered substantially during the course of the 20th century. Subsequently, I paint a typology of five different shifts in experience over the course of this thesis. I will characterise these shifts in chronological order as: unhinged modernity (chapter 2); ideological progress (chapter 3); a radically open future (chapter 4); the crisis of political and economic orders (chapter 5); and presentism (chapter 6).

Furthermore, this theoretical framework draws attention to the devices and practices involved in producing a decisionist imaginary. Consequently, each of the shifts of experience of time can be coupled to a different planning technique. I want to argue that planning developed models in reaction to different experiences of time that reflected the politics of temporality of the period. My research is aimed at uncovering the temporal and political dimensions of Dutch planning models. In chronological order, these models are: the ISOTYPE graphs and business-cycle models (chapter 2); decision models (chapter 3); system-dynamics models (chapter 4); neoclassical growth models (chapter 5); and environmental scale models (chapter 6).

---

95  Helge Jordheim, "Against Periodization: Koselleck's Theory of Multiple Temporalities," *History and Theory* 51, no. 2 (2012): 151–71, https://doi.org/10.1111/j.1468-2303.2012.00619.x.

96  Marcus Colla, "The Spectre of the Present: Time, Presentism and the Writing of Contemporary History," *Contemporary European History* 30, no. 1 (February 2021): 126, https://doi.org/10.1017/S096077732000048X; Edelstein, Geroulanos, and Wheatley, "Chronocenosis," 20.

# II. Methodology

## *1.7 Aims: Combining History and Philosophy*

With the theoretical framework established, the main complex of issues (*problematique*) I wish to address has become more concrete. What is missing for the formulation of selection criteria for the appropriate methods and sources is a clear definition of what the aims of the thesis are. Therefore, a reflection on my intentions is in order. This study aims to be both a historical study and a philosophical analysis. Hence, I seek to combine history and philosophy in a single approach. Although historians and philosophers have put great effort to rhetorically delineate the academic field of philosophy from history (also a form of boundary work), the two disciplines remain closely intertwined.[97] Intellectual history incorporates ideas from political theory,[98] and philosophers of science look to the history of science to explicate and sharpen scientific concepts.[99] Furthermore, philosophy is still being taught as part of a tradition in which it is important to read the works of past philosophers,[100] and the historicism of historians is as much a product of

---

[97] This is not to deny that discipline forming around philosophy and history in the 19th century had its purpose and proved to be highly productive. Hence, I do not wish to argue for the abolishment of disciplines or the merging of history and philosophy on an institutional level, but merely that the scholarly fundaments of both disciplines are not that different. For more on the purpose of disciplines, see: Rudolf Stichweh, "The Sociology of Scientific Disciplines: On the Genesis and Stability of the Disciplinary Structure of Modern Science," *Science in Context* 5, no. 1 (ed 1992): 3–15, https://doi.org/10.1017/S0269889700001071.

[98] James Alexander, "Review of 'Michael Oakeshott and the Cambridge School on the History of Political Thought' by Martyn P. Thompson," *Cosmos + Taxis* 8, no. 2–3 (2020): 66–83.

[99] Hasok Chang, "Beyond Case-Studies: History as Philosophy," in *Integrating History and Philosophy of Science*, Boston Studies in the Philosophy of Science (Dordrecht: Springer, 2011), 109–24, https://doi.org/10.1007/978-94-007-1745-9_8.

[100] Alasdair Macintyre, "The Relationship of Philosophy to Its Past," in *Philosophy in History: Essays in the Historiography of Philosophy*, ed. Jerome B. Schneewind, Quentin Skinner, and Richard Rorty, Ideas in Context (Cambridge, UK: Cambridge University Press, 1984), 31–48, https://doi.org/10.1017/CBO9780511625534.005.

philosophical labour as careful source criticism.[101] Given this intimate relationship, my thesis is that (a) philosophical questions are not fundamentally different from historical questions; (b) the same question can receive, based on the same material and argumentation, a philosophical as well as a historical answer; and (c) the aims of history and philosophy overlap.

Since philosophy and history in their modern incarnations are close siblings, many philosophers and historians have attempted to combine the two, such as in the subdisciplines of history and philosophy of science (HPS)—especially in the works of Hasok Chang, to which my combination of the two disciplines is indebted—and the history of philosophy of historiography. For the benefit of comparison, I have chosen two different popular models that focus particularly on concepts. These models are *Foucauldian genealogy* and *philosophical hermeneutics*. Afterwards, I will sketch my own combination.[102]

Foucauldian or philosophical genealogy (not to be confused with the study of families and lineages) is a philosophical approach based on the work *The Genealogy of Morals* (1887) by Friedrich Nietzsche and proposed by Foucault in 1971.[103] This approach studies the history of concepts by investigating the many branching paths of a concept's past iterations and attempts to understand how their linages influence the present use of that concept. The central idea of conceptual genealogy is that the past uses of concepts have a bearing on their present uses. In other words, the present uses of concepts bear traces of previous utilisations, even if the context and practice of the concept has changed. The reason for the past bearing on the present is that human beings usually do not invent concepts from scratch, but pick up existing concepts that are already shaped by different practices. New meanings or functions are thus superimposed on older concepts, leading to a complex layering in one concept. Often the intended uses of a concept overlap and mix with older uses. Consequently, some uses might seem more inviting, whilst they do not solely stem from the concept's utilisation in the present context. The concept has its own life, so to speak, and can have secondary, unintended uses. Furthermore, these older uses are often implicit; they act outside of the intentions of the user. Using concept *x* for purpose

101 Hayden V. White, "The Burden of History," *History and Theory* 5, no. 2 (1966): 111–34, https://doi.org/10.2307/2504510.
102 HPS could also have been a logical starting point. However, since this field is primarily focussed on the nature of knowledge and this thesis more on ideas, the study of concepts provides an easier entry into the issues concerned.
103 Michel Foucault, "Nietzsche, Genealogy, History," in *Aesthetics, Method, and Epistemology*, ed. James Faubion, trans. Donald Bouchard and Sherry Simon, Essential Works of Foucault, 1954–1984, Vol. 2 (New York: The New Press, 1998), 369–91.

*y* is therefore not as innocent or neutral as *x* or *y* may at first seem: Investigating the history of concepts reveals hidden aims and interests incorporated in the complex layering of present-day concepts.

As Catarina Dutilh Novaes has recently argued, philosophical genealogy has similar aims to the analytic philosophy approach of conceptual analysis.[104] Both attempt to determine the functioning of present-day concepts through an analysis of their different meanings. What appear as paradoxes or contradictions to the present user might be explained through an analysis of the concept, showing its murkiness and entanglements. The only difference is that genealogy chooses a historical form of analysis, whereas conceptual analysis in its Anglo-American interpretation often does not. In a recent iteration of conceptual analysis, however, under the rubric of *conceptual engineering*, the history of concepts is made an intrinsic part of the analysis of concepts. Beyond solving problems in science and ethics by analysing philosophical concepts, and by showing that most conceptual problems are only illusionary, conceptual engineering tries to improve concepts so that they can change social reality. It therefore takes a more interventional approach to philosophy—it is no longer solely the task of philosophy to interpret the world, but also to change it—rather like the engineers or scientists who also intervene with their object (as described in the R-I model), and combine it with the "nobler" social goals of philosophy.[105] In that sense, conceptual engineering is not only a method, but is also fundamental to the project of philosophy. Instead of metaphysics as first philosophy, as Aristotle proposed, conceptual engineering can form the basis for all other branches of philosophy.[106]

Conceptual engineering has the search for post-metaphysical fundaments of philosophy in common with its biggest rival: philosophical hermeneutics. Often associated with Wilhelm Dilthey, Martin Heidegger, and Hans-Georg Gadamer, but in a broader definition applicable to a large group of post-Hegelian philosophers, philosophical hermeneutics seeks to provide a foundation of philosophical concepts in the historical development of those concepts. Its basis is thus the historical process itself. Whereas genealo-

---

104 Catarina Dutilh Novaes, "Carnap Meets Foucault: Conceptual Engineering and Genealogical Investigation" (Conceptual Engineering Seminar, University of St Andrews, 2020).

105 For example: Sally Haslanger, "Gender and Race: (What) Are They? (What) Do We Want Them To Be?" *Noûs* 34, no. 1 (2000): 31–55, https://doi.org/10.1111/0029-4624.00201.

106 Edouard Machery, *Philosophy Within Its Proper Bounds* (Oxford: Oxford University Press, 2017).

gy tries to dispense with the intentions of individual actors as much as possible, hermeneutics takes the understanding of the human subject as a starting point for its philosophical investigation. Human beings do not understand things in isolation, but rather against a certain background—a horizon of understanding, or worldview (*Weltanschauung*)—in which certain events and things are emphasised and questioned, whilst others are assumed. For those engaged in historical research it is important, not only to understand the intricate details of the thing one is studying, but also the background against which it appears. Such a horizon of understanding consists of psychological states, but can also comprise socio-economic, technical, political, religious, and cultural elements, and is thus the object of historical study proper. Philosophers can only make this past horizon accessible by placing it in their own horizon of understanding. The danger of interpreting the past in contemporary terms can be adverted in the process of hermeneutics if philosophers alter their own horizon of understanding in relation to the horizon that they are investigating[107]—a process referred to as *the hermeneutic cycle*.[108]

The result of hermeneutics is a broader understanding of the present. That is to say, the philosopher's horizon is itself a historical product. Doing hermeneutics can therefore provide insight into the philosopher's own process of understanding the world. This process broadens the horizon itself as more things fall within the realm of the philosopher's understanding. In this manner, the historical process leads to an increased understanding of the world and the concepts the philosopher uses to understand it. There are two ways to understand this hermeneutical claim: either a more Hegelian organicist interpretation, in which concepts develop in accordance with their own logic and the logic of history into their fullest expression; or a communicative interpretation in which philosophy is a conversation between people (both from the past and present) who can reach an agreement on philosophical matters. In the latter context, Gadamer, Richard Rorty, and Habermas (each in their own distinct ways) are most important proponents. Whatever the case, the ultimate aim of hermeneutics is to allow the human subject to understand itself as simultaneously (historically) situated and free. In that

---

107 Confusingly enough, this tendency is often called presentism, but should be distinguished from Hartog's use of the term. According to David Armitage, there are at least five different understandings of the notion of presentism. See: David Armitage, "In Defense of Presentism," in *History and Human Flourishing*, ed. Darrin McMahon (Oxford: Oxford University Press, 2021).

108 Hans-Georg Gadamer, *Truth and Method* (London: Bloomsbury Academic, 2004), 267–74.

sense, history in the hermeneutic interpretation is of use to the life of the researcher, both in terms of personal growth and in being a contributing member of society (known in German as *Bildung*).

Hermeneutics, in contrast to genealogy, has been accused of being elitist and culturally conservative.[109] The history studied for the purpose of *Bildung* often consists of the culture associated with a learned and political elite. The subject understands itself as part of a single, often national culture with little room for dissenting voices. Moreover, the total of past interpretations of a concept that effect the present—the history of effect (*Wirkungsgeschichte*)—is often affirmative in hermeneutics. Consequently, hermeneutics is less well equipped to critique concepts or traditions in the present and cannot dispense or renounce with the tradition that produces the concept. It should be noted, however, that the opposition between the conservative inclination of hermeneutics and more emancipatory forms of history have been exaggerated in the clashes of the political temperaments of scholars.[110] Discord and dissent can exist in a holistic concept of culture, as Hegel's famous analysis of the lordship and bondage relationship shows.[111] It is indeed true that philosophical hermeneutics is sceptical of more universal and principled understandings of normative commitments, as might, for example, be the case with emancipation. However, this does not mean that it cultivates normative commitments of its own, as its openness, communication, and consensus speak similarly of an ethos that transgresses the strict bounds of history, albeit always remaining anchored in history. It likes to pride itself on a more modest ambition, aiming at a heightened sensibility rather than a straightforward intervention. As such, the messiness of present-day concepts is often embraced by philosophical hermeneutics, abstaining from the desire for clarity that conceptual engineering professes.[112]

---

109 See: Paul Ricœur, "Hermeneutics and the Critique of Ideology," in *Hermeneutics and the Human Sciences: Essays on Language, Action and Interpretation*, ed. John B. Thompson, Cambridge Philosophy Classics (Cambridge, UK: Cambridge University Press, 2016), 23–60, https://doi.org/10.1017/CBO9781316534984.005. It should be noted that Foucault always remained vague on the normative implications of his method. Critics have therefore spoken of "crypto normativity". As a result, the opposition of the aims of genealogy and hermeneutics might not be so absolute. See: Jurgen Habermas, *The Philosophical Discourse of Modernity: Twelve Lectures*, trans. Frederick G. Lawrence (Cambridge, MA: The MIT Press, 1990), chap. 10.

110 A. T. Nuyen, "Critique of Ideology: Hermeneutics or Critical Theory?," *Human Studies* 17, no. 4 (1994): 419–32.

111 G. W. F. Hegel, *Phenomenology of Spirit*, trans. A. V. Miller (Oxford: Oxford University Press, 1977), 111–19.

112 The idea of scientific practice based on representing and intervening was al-

In both models, the kind of questions that historians and philosophers ask are in principle the same. Inquiry into history and philosophy starts with the present concern of what something is, or what something means. These questions do not appear "out of the blue", but are grounded in lived experience. Hermeneutics emphasises that historical questioning starts from an experience of historicity, often taking the form of a break, a disruption, or a sudden experience of suffering in a human life—a sudden breakdown of meaning, or an overflowing of the conceptual scheme.[113] Historical questioning leads to the development of a narrative in which the past gains meaning and the things in the present (re)gain their historical meaning or sense (*Sinn,* in German). This is precisely what I have defined as historicity. As I have argued in the second section, this understanding is practically the same experience of time that Koselleck singled out as fundamental to the modern concept of historicity.

Hermeneutics, in addition to looking for historical meaning, asks for philosophical meaning—for example, the achievement of freedom, or the question of what it entails to be a good citizen. Genealogy, however, operates differently, as its questions do not stem from the experience of historicity, but rather from suspicion of it—the feeling that things might be different to how they appear. Genealogy is not looking for historical meaning *per se*, but diagnoses concepts as if they were sick patients, looking instead for hidden causes. Furthermore, the development of concepts is not necessarily turned into a narrative in genealogical research. Rather, they are part of a contingent process of superimposing, layering, and transmission. This is why Simon speaks of Foucauldian genealogy as an example of a new form of history that dispenses with continuity and development.[114] Hermeneutics, although not discussed by Simon, sticks closer to the modern regime of historicity. In addition to this (new form of) historical questioning, conceptual engineering asks how a concept can be amended.

--------

ready criticised by Heidegger and followers of philosophical hermeneutics often heed these Black Forest warnings. See: Martin Heidegger, "The Age of the World Picture," in *The Question Concerning Technology, and Other Essays*, trans. William Lovitt (New York: Garland Publishing, Inc., 1977), 115–54.

113 A point made by Simon in reference to the works of Ankersmit and Runia, see: Simon, *Unprecedented Change*, 134.

114 Simon, 16. This difference should not be overstated. As I will show below, Luciano Floridi still speaks about the tasks of sense making through history. Also, in genealogy, the things in the present are engulfed with historical meaning—that is, historicity. I would therefore not claim that genealogy dispenses with development. Rather, it is the narrative that genealogy denies to history.

The type of answers philosophy and history seek also overlap. In both models, a good answer can take the following form: The past interpretation of $x$ is a fact and can be explained or was formed by development/function/ situation $y$. Historians, in addition, provide an answer of how $y$ and narrative $w$ give meaning to $x$, whilst hermeneutics answers how the history of the effects of $x$ bears upon the meaning of $x$ in the present. Conceptual engineering diverges more, as it seeks to answer how $y$ is problematic or causes problems in the present and how concept $x$ could function differently.

An even stronger discord exists between both models about the aim of philosophy in contrast to that of history. This has partially to do with the values both models commit to, but more importantly with the delineation of tasks that each model proposes. Luciano Floridi, a proponent of the conceptual engineering approach (he prefers to speak of *conceptual design*), has argued that philosophy's understanding of its past—what he calls "historical curation: the preservation, maintenance, and study of the noetic assets accumulated by humanity to answer open questions"—is "a vital task", but "should not be confused with the actual production of such assets. Only the latter qualifies philosophy as the source of conceptual innovation."[115] In other words, precisely that which philosophical hermeneutics tries to achieve— the bringing forth of "mental contents, conceptual frameworks, intellectual creations, intelligent insights, dialectical reasonings" (what Floridi calls *noetic assets*) for "the giving of meaning and making sense" of reality[116]—cannot be accomplished (solely) by historical curation, which includes the study of the past.[117] Instead, philosophy is based on a maker-knowledge conception, in which philosophers have to make or design noetic assets (semantic artefacts) for the specific purpose of intervening in social reality. Contrary to hermeneutics, philosophers cannot content themselves with using the concepts as they are elucidated by their history of effect.

In the light of the questions this thesis asks, I do want to retain the notions of development and historical sense. The questions that motivated this

---

115 Luciano Floridi, *The Logic of Information: A Theory of Philosophy as Conceptual Design* (Oxford: Oxford University Press, 2019), 24.

116 Floridi, 18–19.

117 According to Floridi, since the philosophical question can be constrained by the empirical findings of other sciences, the empirical findings of history are essential to answering philosophical questions. Different from my characterisation of conceptual engineering above, Floridi does take philosophical questions to be fundamentally different from historical questions, as philosophical questions are initially open (and ultimately closed), and historical questions are always closed—i.e., they can only receive one proper answer. See: Floridi, 22.

historical investigation, as I made clear in the introduction, stem from a his-
torical sense of our present use of the notions of socio-economic planning
and the future: One could say that it stems from the crisis of future and the
predicament of presentism. Also, I will attempt to narrate a development
of political thought and planning for the 20th century that aims to establish
a resonance (not to say harmony) or continuity between the past meaning
of planning and its present practice. Consequently, my questions are in line
with the hermeneutical model.

Also, with regard to the aims of history and philosophy, my approach
lies closer to hermeneutics than to genealogy and conceptual engineering.
In contrast to the conceptual engineering approach, I think that the rela-
tionship between the history of concepts, and how new ones are produced,
is so strongly entangled that it makes no sense to divide the two tasks. In
line with hermeneutics, I consider the philosopher to be part of the history
of effect that continues to operate through the historical practices of the
philosopher in the present. The creation of new concepts is part of the his-
torical workings of concepts; curating and designing concepts are both part
of the same process. Although I do not wish to take the totality of the history
of effect into account in my analysis of the present concepts under discus-
sion, my history of planning, as I will show in the conclusion, makes visible
that something is lacking in our current concepts of planning and politics.
Therefore, this thesis contains an invitation to retrieve a meaning of the state
from the conceptual reservoir of the past.

Although I do share the genealogical and philosophical hermeneutic
commitment to a post-metaphysical basis for philosophy, both projects are
unsatisfactory for the present study with regard to their philosophical aims.
Furthermore, it is not the primary aim of the thesis to improve on the con-
cept of planning, nor to intervene in social reality directly. My study is not
aimed at an improved practice of planning, nor to bring planning to its full-
est expression. Contrary to hermeneutic goals, my study will not contribute
(directly) to transforming planning in the practice of achieving freedom and
good citizenship. Consequently, I will adopt the hermeneutic model for the
present study, but take the liberty to slightly amend its philosophical aims.
To be more precise, I will supplement the hermeneutic model with what I
call a *historicist understanding*.

Historicism is a contested notion, but it is generally understood as a
mentality that underlies modern history as an academic discipline.[118] Al-

118 Daniel Fulda, "Historicism as a Cultural Pattern: Practising a Mode of Thought," *Jour-
nal of the Philosophy of History* 4, no. 2 (January 1, 2010): 138–53, https://doi.org/10.1163/

though associated with pioneering figures of the German historical school such as Leopold von Ranke, the notion only gained traction around the turn of the 19th century as a problema most famously expressed by Ernst Troeltsch and Karl Mannheim.[119] Interestingly, historicism has been criticised, not only for being overly tied to the totalising ideas of the stages of development and progress, but also for being ideological in service of the nation state, as well as too relativistic, condemning each historical event to the confined boundaries of its historical context. On the one hand, historicism reduces history to a sequence of causally related events, whilst on the other, it confines historical actors to the spirit (*Geist*) of their times.

Escaping the murky discussions of what historicism is or is not (or was and was not), I take the liberty to adopt the notion for my own philosophical ends.[120] For my purposes, the totalising idea of development and the relativism of each historical period are two sides of the same coin. Indeed, historians do not escape linking their historical material to larger developments or (contingent) processes for their meaning. As Koselleck argued, the past as past can only appear against the background of an open horizon of expectation. However, such developments also allow historians to place the past at a distance. Disassociation with the past is only possible through association with a larger sense of historicity. As Rüsen writes:

> [Historical] truth would then be the capacity for accepting difference through others. Truth gets its subjective depth and life-serving force from the mental power from which human beings (can) contend and (must) assert their uniqueness in relation to others while accepting the otherness of others.[121]

The otherness of the past is only achieved when one respects and remains open to the difference of the past, whilst simultaneously relating to it, and even taking care of it.

Such an interpretation of the historicist understanding remains true, albeit indirectly, to the practical concerns of the lifeworld. Distancing the past can only be achieved if historians internalise the virtues of openness, re-

---

187226310X509493.

119 Ernst Troeltsch, "Die Krise Des Historismus," *Die Neue Rundschau* 33 (1922): 572–90.

120 For such "murky" discussions, see: Herman Paul, "The Specter of Historicism: A Discourse of Fear Herman Paul," in *Historicism: A Travelling Concept*, ed. Herman Paul and Adriaan van Veldhuizen (London: Bloomsbury Academic, 2020).

121 Rüsen, *Evidence and Meaning*, 40.

spect, tact, and relativism. In the terms of Max Weber, they internalise these virtues as they know that these normative commitments cannot influence or taint the actual practice of historiography.[122] Consequently, the events of the past gain their meaning in reference to one singular development of history (historicity), establishing a continuity between past, present, and future. At the same time, the past gains its meaning from the context of its own period, which is radically different from the present. In other words, meaning in the past is different from meaning in the present. This discontinuity is paradoxically established through the continuity of historical development. Differently from hermeneutics, in the historicist understanding, the bridging of the two meanings does not have to add to an ultimate philosophical or political goal in the present.

The benefit of the past as radically different from the present is that everything becomes a historical variant. In other words, there is nothing essential, fixed, or outside of history. There is no essential human nature, no reality underlying the world in its entirety, and no universal moral norms. The historian cannot, therefore, appeal to any stable, extra-historical, anthropological, or transcendental notions to understand the past. The past can be radically different in terms of ontology, epistemology, and ethics, and is contingently so. This understanding is different (and more radical) from Koselleck, who based the possibility of the experience of historicity on philosophical anthropological grounds. Moreover, history does not move towards more invariant modes of understanding and the understanding in the present is not better than past understandings.[123] Consequently, a continued philosophical tradition that addresses a core set of questions cannot be assumed, or is even unlikely to exist. Historical developments, therefore, do not cumulate in philosophical insights or civic virtues in the present, as hermeneutics proposes.

There are two classic philosophical objections to this understanding of the past. First, if everything is historically relative, how can the historian/philosopher account for the larger development of singular history? Second, if the past only indirectly relates to the present, is Hegel then not right in asserting that historical research, as done by professional historians, bears no relevance to the present or the future?[124] My answer to the first prob-

---

122  For such an interpretation of the works of Weber, see: Kelly, *The State of the Political*, 26–37.

123  Georg G. Iggers, "Historicism: The History and Meaning of the Term," *Journal of the History of Ideas* 56, no. 1 (1995): 129–52, https://doi.org/10.2307/2710011.

124  Georg Wilhelm Friedrich Hegel, *Introduction to the Philosophy of History: With*

lem is twofold. First, as noted above, Hartog's approach to historicity as a method of comparative anthropology allows history a framework that is not independent of historical variance itself. Second, the basis of history rests on the virtues of relativity and openness of the researcher, which again are not separated from historical variance. Any theoretical and ethical groundwork for history is itself part of a historical process.[125] In short, relativism should not be understood as a truth that is dependent on the viewpoint of the researcher; rather, the meaning of a thing is dependent on its relationship with other things.[126] A consequence of this methodological choice is that my own theoretical framework and philosophical conclusions are relative and cannot be systematic or generalisable—that is to say, they are not extra-historical. They only add to the construction of the comparative framework on the basis of which (if my conclusions are correct) new research can be conducted.

For the reply to the second objection, I would like to adopt a dictum by Hasok Chang and conceptualise *history as the continuation of philosophy by other means*.[127] In the context of the natural sciences, Chang argues that the commitment to the virtue of openness is a core aspect of the identity of science. However, due to disciplinarily focus and unreflexive attitudes, science often fails to live up to this ideal. HPS, Chang argues, can cultivate the virtues of science by studying what falls outside of the scope of individual disciplines. In analogy, I would argue that philosophy is committed to the openness of its questions, but cannot always live up to that ambition. Philosophy claims not to depart from any self-evident presumption; all presumptions should be questioned. However, too broadly conceived philosophical questions cannot be answered (as famously illustrated by Kant's

---

*Selections from The Philosophy of Right*, trans. Leo Rauch (Indianapolis: Hackett Publishing Company, Inc., 1988), 13.

125  The comparative framework and ethical commitment of the researcher balance out and are reciprocal. Another critique levelled at historicism and hermeneutics is that, by making historiography dependent on the ethical virtues of one specific (European, transatlantic) culture, historiography is confined to that culture. It would thus repeat the error of not ascribing history to other cultures, as Fabian objected (Fabian, *Time and the Other*, 25–33). However, by placing the ethical commitments of the researcher in the comparative framework, thus assuming that all cultures have historicity, I think that historicism escapes this problem. For such a critique, see: Habermas, *The Philosophical Discourse of Modernity*, chapter 1.

126  For such a reading of German historicism, see: Katherina Kinzel, "Method and Meaning: Ranke and Droysen on the Historian's Disciplinary Ethos," *History and Theory* 59, no. 1 (2020): 22–41, https://doi.org/10.1111/hith.12144.

127  Hasok Chang, "History and Philosophy of Science as a Continuation of Science by Other Means," *Science & Education* 8, no. 4 (July 1, 1999): 413–25, https://doi.org/10.1023/A:1008650325798.

antinomies), and philosophy ultimately aims towards ultimate answers, even if its questions are open.[128] As Floridi suggests, philosophy is eschatological: The ultimate timeless answer can enter the profane realm of questioning at any moment. Likewise, even the most mundane question, such as "What is 1 + 1?", or "How many guests should I invite for my post-COVID party?", can be philosophical in nature, and cannot be excluded from philosophical inquiry, even if philosophy has developed its own formulations and tools to deal with such questions.[129]

Historicism helps philosophy to overcome these two problems. In historicism, philosophical questions are always part of a web of other questions, and it is the historian's task to investigate how the noetic assets relate to one another, always allowing philosophical questions a situatedness that allows for concrete answers.[130] In the same manner, by confining concepts to a specific period, historicism shows when, how, and why certain questions become philosophical. Historicism frees philosophical questions from their confinement to abstract worlds, grounding them firmly in the messy historical reality. In that sense, historicism protects philosophy from conducting philosophical conversations in a void. Since historicism can be understood to have secularised eschatology into historical development (on which more in the third chapter), philosophical questions are given the possibility of receiving their answers in the profane temporal realm. Philosophical questions are caught in an ever perpetuating cycle of reformulations and reiterations, making the process of philosophical questioning open-ended.

Let me close this section by explaining how I think literature from the history of knowledge already adheres to this philosophically-minded, historicist understanding. Bruno Latour has argued that relativism (an inherent part of historicism) helps to undo presumptions of their self-evident nature, making new and open philosophical inquiry possible.[131] By insisting

---

128  Floridi, *The Logic of Information*, 21.

129  Floridi, 14, 24.

130  The notion of "situatedness" is also central to STS and feminist thought. See: Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Feminist Studies* 14, no. 3 (1988): 575–99, https://doi.org/10.2307/3178066.

131  Latour is taken by Simon as a representative of the "constructivist" understanding, thus departing from the modern regime of historicity. Simon, *Unprecedented Change*, 130. Indeed, Latour's polemics against the notion of modernity indicate that he is closer to an understanding of history as proposed by Edelstein and co-authors (op. cit. note 46). His cybernetic frameworks have more in common with chronocenosis than with the German historical school. Yet at the same time, his ideas on the history of science in its emphasis on relativism can be interpreted as

on ontological variance, Latour has exposed the implicit reliance of philosophers and historians of science on the reality of the scientific object that they are studying. By adopting what Latour calls a double symmetry principle, (discarded) scientific entities of the past can reveal themselves as relevant actors.[132] In this approach, new materials, ideas, or actors emerge that are of relevance in understanding the historical and philosophical issue at hand. The more usual philosophical explanations, such as logic, power, and causality, are bracketed via historicism, allowing for an openness in which new questions and entities can emerge.

## 1.8 Methodology: Experience and Practice

As sketched in my theoretical framework, two essential human faculties are central to the argument I want to make: the experience (of time); and practices (of planning and the state). When it comes to intellectual history, these central notions represent two very different historical methods. In fact, the focus on practices by intellectual historians has often been conceived as a reaction against the overt focus on experience by an older generation of historians.

The best example of this criticism is the middle and late work of Foucault.[133] In *The Order of Things* (1966), Foucault moved away from an idea of history predicated on specific authors and instead focussed on the deeper structures of knowledge that designated the limits and rules of scholarly knowledge within a specific period. How individual worldviews and experiences informed the scholarship of a specific historical actor did not matter; their knowledge production had to be understood on a structural level gov-

---

in line with historicism. For such an interpretation, see: Jouni-Matti Kuukkanen, "Historicism and the Failure of HPS," *Studies in History and Philosophy of Science* 55 (February 2016): 3–11, https://doi.org/10.1016/j.shpsa.2015.08.002.

132 Bruno Latour, *The Pasteurization of France*, trans. Alan Sheridan and John Law (Cambridge, MA: Harvard University Press, 1988); Bruno Latour, "On the Partial Existence of Existing and Non Existing Objects," in *Biographies of Scientific Objects*, ed. Lorraine Daston (Chicago: University Of Chicago Press, 2000); cf. Theodore Arabatzis, "On the Historicity of Scientific Objects," *Erkenntnis* 75, no. 3 (2011): 377–90.

133 Foucault's earlier work was very much focussed on excavating experiences from the past. In fact, one could read his whole oeuvre as an attempt to realign subjective experiences with more structural forces. On this point, see: Hubert Dreyfus and Paul Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics* (Chicago: University Of Chicago Press, 1982).

erned by so-called discourse rules rather than a transcendental, unconscious, or observing subject.[134] In his later *Discipline and Punish* (1975), Foucault extended his theory by describing how the human subject adheres to certain apparatuses of knowledge through the disciplinary workings of surveying practices. Seemingly benevolent practices, such as education and urban renewal, were part of complex power systems, giving shape to identities and subjectivities.

The study of practice had the same gains as the structuralist approaches that preceded it, namely the dispensing of the autonomous human subject as the centre of historical research: It was no longer necessary for the historian to engage with the subjectivity of historical actors—their intentions, beliefs, emotions, etc.—which to a younger generation seemed vague, inaccessible, or unjustly privileging the spiritual world of abstract ideas above the profane world of concrete objects. Practice, it was thought, was sufficient to understand the world-making of historical actors, and the validity of knowledge claims was determined by the practice rather than the underlying idea.[135] In short, where older histories of ideas took human experience as the basis and starting point of historical research, a newer generation sought to explain subjectivity—including experience—as a product of everyday practices.

Especially in the history of sciences and humanities (recently rebranded as the history of knowledge),[136] the study of practices has taken root.[137] Previously, changing scholarly knowledge was explained through the analysis of concepts and ideas. An example is Alexandre Koyré monumental *From the*

---

134  Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (London: Routledge, 1989), xiv. It should be noted that *The Order of Things* was still built on a very phenomenological framework, as he speaks about "the pure experience of order" (Foucault, xxiii.) Later he attempted to distance himself even more from the phenomenological tradition, see: Michel Foucault, "Life: Experience and Science," in *Aesthetics, Method, and Epistemology*, ed. James Faubion, trans. Robert Hurley, vol. Vol. 2, Essential Works of Foucault, 1954–1984, Vol. 2 (New York: The New Press, 1998), 465–78.

135  The rise of the notion of practice is far more intricate than Foucault's influence alone. A philosophically insightful turn in this development is the so-called practice turn, see: Karin Knorr Cetina, Theodore R. Schatzki, and Eike von Savigny, eds., *The Practice Turn in Contemporary Theory* (London: Routledge, 2005).

136  See for example: Sven Dupré and Geert Somsen, "The History of Knowledge and the Future of Knowledge Societies," *Berichte Zur Wissenschaftsgeschichte* 42, no. 2–3 (September 2019): 186–99, https://doi.org/10.1002/bewi.201900006.

137  Suzanne Marchand, "How Much Knowledge Is Worth Knowing? An American Intellectual Historian's Thoughts on the Geschichte Des Wissens," *Berichte Zur Wissenschaftsgeschichte* 42, no. 2–3 (September 2019): 1–24, https://doi.org/10.1002/bewi.201900005.

*Closed World to the Infinite Universe* (1957), where the scientific revolution of the late renaissance is explained through the expansion of the worldview of scholars beyond the sub- and superlunary spheres into an infinite universe.[138] In contrast, in recent years, the detailed study of scholarly practices, such as lab work, archival research, the organisation of research seminars, the collection of archaeological material from a dig site, or the drawing of index-tables, has become standard practice. A good example here is Lorraine Daston and Peter Galison's *Objectivity* (2007), in which changing notions of objectivity are explored through the shifting drawing practices of encyclopaedia makers.[139] Recently it has also become popular to study the spread of ideas by investigating how practices travel through international networks, journals, and societies. In this context, the travelling aspect of scholarly knowledge can then itself again be described as a practice.[140]

Historians of ideas have been a lot more reluctant to adopt practices as their main object of research—perhaps understandably, given the nature of their research subject. Here more traditional methods of historiography still rule supreme. Often (semi-) canonical figures are placed in the broader context of their contemporary scholars, influences, political debates, developments in the arts, or social and economic changes, with the aim of either reconstructing a horizon of understanding in which the historical actor explicates the reasons and motivations behind a specific concept, idea, or argument, or to trace linages of influences.[141]

Within intellectual history, rather than the practice turn, it is the linguistic turn that has made the largest methodological impact, particularly in the form of Quentin Skinner's contextualist methodology.[142] In this method, texts are theorised as part of a practice or language game. However, the practices (of the language game) remain very textual, and rarely focuss on other noetic assets or material tools. Since language does not have a privi-

---

138 Alexandre Koyré, *From the Closed World to the Infinite Universe* (Baltimore London: Johns Hopkins University Press, 1957).

139 Lorraine J. Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007), chap. 2.

140 See for example: James A. Secord, "Knowledge in Transit," *Isis* 95, no. 4 (December 2004): 654–72, https://doi.org/10.1086/430657; Rens Bod et al., "The Flow of Cognitive Goods: A Historiographical Framework for the Study of Epistemic Transfer," *Isis* 110, no. 3 (September 2019): 483–96, https://doi.org/10.1086/704673.

141 Suzanne Marchand, "Weighing Context and Practices: Theodor Mommsen and the Many Dimensions of Nineteenth-Century Humanistic Knowledge," *History and Theory* 59, no. 4 (December 2020): 144–67, https://doi.org/10.1111/hith.12186.

142 Quentin Skinner, "Meaning and Understanding in the History of Ideas," *History and Theory* 8, no. 1 (1969): 3–53, https://doi.org/10.2307/2504188.

leged status in my theoretical framework and a focus on solely written texts is inadequate in the light of the theoretical goals of this thesis, I will discard this methodology.

If one does not completely share Foucault's gleeful prophecy about the disappearance of subjectivity, "like a face drawn in sand at the edge of the sea",[143] take the subjectivity of others as completely inaccessible, or see the focus on individuals as problematic, then there are no formal obstacles to the combination of both the study of experience and practice. Indeed, several history of knowledge authors, such as Suzanne Marchand and Herman Paul, have already done so.[144] As long as it is possible to show how experiences inform scholarly practices—or to put it another way, how practices are constructed on a specific horizon of understanding—combining the two approaches is completely feasible.

I bring these two approaches together by dividing the historical research of the thesis into three steps. The first step investigates the specific conceptualisation of modern historicity under which theories and practices of planning were formulated and conducted. To that end, I will analyse philosophical texts on the subject of modernity, progress, and the development of history and historicity from the period under discussion. Whilst the analysis will focus on the Dutch context, tracing the philosophical influences of the authors, I will take a more international perspective were appropriate. Following Koselleck's theory as outlined above, I will investigate the experience of time underlying these theoretical discussions. Therefore, this step in my analysis focusses on the temporal experience. Subsequently, these unearthed experiences will be linked to public debates on planning in the Netherlands, thereby showing how planning always reacted to the modern regime of historicity.

The first step has a rather broad scope in terms of ideas, themes, and concepts, and thus often assumes a softer focus on larger developments. In contrast, the second step is very focussed. By using research notes and policy memos of Dutch planners and policymakers, I reconstruct planning and policymaking practices, centring my field of view in particular on the use of mathematical and computer models. In the final step, I link the practices to the experiences by showing how the images of state, society, decision pro-

---

143  Foucault, *The Order of Things*, 422.
144  Herman Paul, "The Scientific Self: Reclaiming Its Place in the History of Research Ethics," *Science and Engineering Ethics* 24, no. 5 (October 1, 2018): 1379–92, https://doi.org/10.1007/s11948-017-9945-8; Marchand, "Weighing Context and Practices."

duced by the practices reflect the experiences of the individuals discussed in the first step. The precise corpora of material and techniques of analysis used in these three steps will be discussed in the next section. For now, I want to introduce some additional methodological approaches for each step that will further help to study experience, practice, and the combination of the two.

For the first step, it is important, not only to understand the writings of the specific authors that I have selected in the context of the different discussions in which they were made, but also how different expectations of the future affected the writings of the authors in question. This works two ways: Writings can, willingly or not, bear witness to an experience of time; whilst a time experience can evoke a *mood*, which shapes an author's writings. To put it more theoretically, the space of experience, formed through different recurrent and singular events, shapes the experience of politics in a temporal manner (the historical sense). This sense allows for, or gives way to, different modalities of political action. I will argue that a mood is often the connective tissue between the experiences of time and politics.

Recent literature in the history of knowledge has argued that scholars cultivate a public persona to protect the authority, integrity, and demarcation of their scholarly field.[145] Such processes of cultivation are spurred by specific moods, and more specific hopes and fears. The abovementioned study into objectivity by Daston and Galison is a good example: They argue that scholars only adopted the notion of objectivity in reaction to a fear of the subjective. As they put it: "All epistemology begins in fear."[146] Beyond the persona, moods are important, since they determine how the horizon of understanding of the scholar is constructed. To use a notion by Heidegger, the mood (*Stimmung*) of scholars is crucial in how they disclose the world.[147] The mood determines which objects light up, which objects are inviting to use, how they develop meaning, as well as which objects fade into the background or become meaningless. Opening the space of scientific investigation is, in that sense, no different to how the world seems more or less inviting

---

145 Lorraine Daston and H. Otto Sibum, "Introduction: Scientific Personae and Their Histories," *Science in Context* 16, no. 1 (2003): 1–8, https://doi.org/10.1017/S026988970300067X; Herman Paul, "What Is a Scholarly Persona? Ten Theses on Virtues, Skills, and Desires," *History and Theory* 53, no. 3 (2014): 348–71, https://doi.org/10.1111/hith.10717; Gadi Algazi, "Exemplum and Wundertier: Three Concepts of the Scholarly Persona," *Bmgn - Low Countries Historical Review* 131, no. 4 (2016): 8–32, https://doi.org/10.18352/bmgn-lchr.10262.

146 372

147 Martin Heidegger, *Being and Time*, trans. John Robinson and Martin Macquarrie (Oxford: Basil Blackwell, 1962), 176.

based on negative and positive moods. Such affect is especially important in understanding the experience of time. The story of history is often painted in affective terms, such as hope or despair of the future; the haunting past; the unbearable past; a painful history; or the fleeting present. Consequently, the expression of a mood by an author provides important material via which to study and understand the functioning of historicity in relation to politics.

In the second step, I will reconstruct the practices of planners and policymakers, mainly by looking at the objects they used in the development of their models or policies. These objects can be the models themselves, policy drafts, the paper on which they are printed, datasets, graphs, computers, etc. In general, I speak of them as techniques. The rationale behind the focus on techniques is that human beings often reason through the use of objects.[148] The object then functions as an extension of the mental cognitive faculties. Drawing tables, for example, helps in the organisation of information, whilst "tinkering" with mathematical formulae helps to discover mechanics that describe economic relationships.[149] Also in the practice of coordination and persuasion, the study of techniques that extend human cognition are essential to understand the functioning of those practices. For example, a standardised schedule helps to create a univocal mindset and work rhythm amongst the civil servants of a particular department;[150] and visualising data in attractive graphs can be a powerful tool in convincing others of an idea.[151] On the basis of a historical study of the artefacts that these techniques leave behind, a reconstruction of the development and reasoning behind a model or policy can be conjured up.[152]

---

148 For a theoretic analysis of the use of artefacts in cognition, see: Edwin Hutchins, *Cognition in the Wild* (Cambridge, MA: MIT Press, 1995); Lambros Malafouris, *How Things Shape the Mind: A Theory of Material Engagement* (Cambridge, MA: MIT Press, 2013).

149 Hsiang-Ke Chao and Harro Maas, "Thinking and Acting with Diagrams," *East Asian Science, Technology and Society* 14, no. 2 (June 1, 2020): 191–97, https://doi.org/10.1215/18752160-8537965.

150 For example, see: Verena Halsmayer, "A Model to 'Make Decisions and Take Actions,'" *History of Political Economy* 49, no. Annual Suplement (2017).

151 For more examples: Beatrice Cherrier, "How to Write a Memo to Convince a President: Walter Heller, Policy-Advising, and the Kennedy Tax Cut," *Oeconomia* 9, no. 2 (June 2019): 315–35, https://doi.org/10.4000/oeconomia.5714; Daniel Hirschman and Elizabeth Popp Berman, "Do Economists Make Policies? On the Political Effects of Economics," *Socio-Economic Review* 12, no. 4 (October 1, 2014), https://doi.org/10.1093/ser/mwu017.

152 Verena Halsmayer, "Following Artefacts," *History of Political Economy* 50, no. 3 (2018): 629–34.

The study of techniques also serves an important purpose in the third and final step. These techniques often produce images of the entities on which they are employed, such as society, the economy, the state, the politician, or the citizen. In line with the R-I model, techniques are used to intervene on a specific object, which produces a representation of that object. For example, in a *tableau economique* a schematising technique is used to produce an image of the relationship between different sectors in a national economy.[153] Moreover, the success of the organising, coordinating, and persuasive practises of the techniques employed is dependent on the image it creates. It is through images that techniques disclose a specific style of reasoning or a horizon of understanding. To put it differently, through images new possibilities emerge and can be explored. For instance, computer techniques produce new visions of the dynamics of society on which new political ambitions and practices can be grafted.

These images not only convey the reasoning present in the specific object in question, but also larger ideas in society. A famous example from the history of knowledge is how, as Paul Forman argued, quantum physics reflected larger cultural ideas in society such as uncertainty, determination, freedom, and vitalism.[154] In a similar manner, the images of planning and policymakers reflect larger cultural concerns. Using the theory of *sociotechnical imaginaries*, it can be argued that artefacts and techniques are used to contribute to the whole of the political and ethical images that form the social imaginary. In other words, techniques influence and produce larger ideas about society. They allow me to connect the concrete practices and artefacts specific to certain locations, institutes, and people to the larger, society-wide experiences of time. I will argue in this thesis that the images of planning express, by the very nature of their subject, a temporal dimension. The story about the agents and development of history contained in such images reflect, or are shared by, the stories in the political sphere. An experience of time specific to a particular period can therefore also be found in the

---

153 Loïc Charles, "The Visual History of the Tableau Économique," *The European Journal of the History of Economic Thought* 10, no. 4 (December 1, 2003): 527–50, https://doi.org/10.1080/0967256032000137702; see also: Loïc Charles and Yann Giraud, "Economics for the Masses: The Visual Display of Economic Knowledge in the United States (1910—45)," *History of Political Economy* 45, no. 4 (November 1, 2013): 567–612, https://doi.org/10.1215/00182702-2369931.

154 Paul Forman, "Weimar Culture, Causality, and Quantum Theory, 1918—1927: Adaptation by German Physicists and Mathematicians to a Hostile Intellectual Environment," *Historical Studies in the Physical Sciences* 3 (1971): 1–115, https://doi.org/10.2307/27757315.

specialist images of planners and policymakers.


## 1.9 Sources and Techniques of Analysis

Following on from the division between the study of experience and practice, and the three-step analysis, I rely on three corpora of primary sources for my historical research.[155] The first corpus concerns published theories of modernity, progress, historical development, and historicity by academics. Here I take a rather broad view, comparing the experience and sense making of Dutch scholars with their counterparts in other industrialised nations, uncovering how they adhered to, or reacted against, the modern regime of historicity. The second corpus is more focussed and consists of the published and unpublished texts by public intellectuals on planning and related issues, such as the role of the state in society and the desirability of a manged economy, primarily in the Dutch context. The third corpus is even more narrow in nature and concerns policy documents related to Dutch planning projects. These documents consist of internal memos, research notes, time schedules, reports, and minutes from governmental organisations, such as the CPB and the Ministry of Public Housing, Urban Planning, and the Environment. In addition, supporting material is used to further contextualise the texts from the corpora. This is very much a "mixed-bag" consisting of news reports, television programmes, parliamentary proceedings, and even the occasional novel. In this section, I will briefly explain how each corpus was composed, as well as the research techniques I utilised.

I begin, however, with a small disclaimer. Writing this now, the given overview is a reconstruction of my mode of operation after the fact. Although it reflects the steps of analysis that I have conducted, the real process was far messier than the reconstruction might suggest. Much of the analytical techniques employed, as well as the authors upon which I have focussed, have changed over the course of this research. Consequently, it is not the methodology with which I started. Therefore, I cannot in honesty claim that the corpus of my analysis was selected on the basis of strict criteria, as the

---

155 I speak of corpora to stress the work that went into compiling, preserving, rendering legible and searchable the diverse and scattered sources on specific topics, both by myself, archivists, and whole scholarly traditions devoted to these topics. For the importance of a reflexive relationship of the scholar to these curating practices, see: Edward Baring, "Ideas on the Move: Context in Transnational Intellectual History," *Journal of the History of Ideas* 77, no. 4 (2016): 567–87, https://doi.org/10.1353/jhi.2016.0031.

compiling and analysis was, in practice, too volatile. I can, however, formulate criteria that can test the resulting corpora of texts on their relevance and how representative they were for the phenomena I intend to describe. Given the fact that historical research is always a process of going back and forth between the researcher and his or her sources, as the process of the hermeneutical cycle prescribes, I believe this will suffice as my stated methodological accountability.

The first corpus of texts upon which I base my reconstruction of the experience of time in relation to planning are theoretical authors on meta-historical subjects. The scholars I have selected for this corpus were mentioned or discussed by Dutch intellectuals in public debates on planning from 1917 to 1999. Surprisingly, philosophical authors, such as Habermas or Pierre Rosanvallon, were not absent from these discussions, and I used references to their works to trace the philosophical influence on these discussions. This led me beyond the national borders of the Dutch discussions. Here I rely on the curating practices of academic philosophy that have placed these texts in a broader philosophical tradition. For the analysis of the first corpora of texts, I have contextualised both the scholarly and popular work of the authors in question in the larger academic and political debates of the period, paying special attention to the markers of affect in relation to the experience of time. Guiding my linking of the prevailing mood and public statements, I ask: Do certain topics, themes, ideas, and concepts gain special significance under a specific mood?

The second corpus comprises the works of intellectuals that were concerned with planning or related topics throughout the 20th century. By the notion "intellectuals", I understand any writer of scholarly work or contributor to public debates on the authority of their scholarly expertise or learning.[156] For the Dutch context, I have chosen to focus in particular (but not exclusively) on authors associated with the Dutch Labour Party (*Partij van de Arbeid,* PvdA). This choice is largely functional. Planning in the Netherlands is strongly intertwined with the history of the Labour Party: The first planning proposals came from the party's precursor, the Social Democratic Workers Party (*Sociaal Democratische Arbeiders Partij,* SDAP). The founder of the CPB, Tinbergen, was a prominent member of the Labour Party. Moreover, the democratisation discussions of the late 1960s and 1970s, which play a prominent role in the discourse on social planning, were particularly fierce

---

156 See: Gil Eyal and Larissa Buchholz, "From the Sociology of Intellectuals to the Sociology of Interventions," *Annual Review of Sociology* 36, no. 1 (2010): 117–37, https://doi.org/10.1146/annurev.soc.012809.102625.

within the Labour Party. Admittedly, the choice to limit myself to a social democratic corpus has its shortcomings. Other parties and political ideologies, such as the Christian Democrats and neoliberalism, were also heavily involved in issues of planning in the period under discussion. Consequently, my overview of planning discussions can be at times one-sided. Unfortunately, studying and discussing these broader discourses proved too expansive given the size constraints of this thesis, especially in the context of the method of close reading and source criticism. These shortcomings will be partly remedied by showing in the appropriate section that the discussions within the Labour Party reflected larger concerns in other political parties, as well as Dutch society as a whole. The bulk of this corpus is composed of the works published by the think tank of the Labour Party, the Wiardi Beckman Stichting and their periodical, *Socialism and Democracy* (*Socialisme en Democratie*), as well as their predecessors, the Scientific Office of the SDAP, and the *Socialist Guide* (*Socialistische Gids*). From newspaper archives, the achieves of *Socialism and Democracy*, and the *Socialist Guide*, I have selected writings on the subject of planning or those relevant to planning (such as the relation between state and market, or the future organisation of society), and the authors who either directly or indirectly engaged in planning theory. The resulting corpus is too large to discuss in its entirety. Therefore, the thesis only discusses the works of a handful of authors who are either representative of larger currents in the planning debate, or were distinct in the manner in which they addressed their experiences of time and historicity.

The history of planning provided in this thesis is a national history. However, the history does not stand on its own. Rather, the developments that the thesis describes, extend beyond the Dutch context. Moreover, I believe that understanding the Dutch history of planning will add to the understanding of a larger international history of planning. To provide this international context, each chapter includes a short analysis of a planning discussion from other West-European nations and the United States.[157] Discussions on planning from Germany, the United States, and France allow me to compare national planning discourses and trace the influences of the Dutch discussions back to foreign sources.

The second corpus, consisting of a series of case studies, contains the material upon which I reconstruct modelling and policymaking practices. These cases are all centred around a specific model or policy project, and are

---

157 Chapter 5 lacks a comparative case. The discussion on French political thought in the sixth chapter also serves as a point of comparison for the planning discussions in chapter five.

confined to either one or two government organisations—either the CPB, a ministry, or an advisory committee. Each chapter discusses one such case. The second chapter discusses the Labour Plan of the SDAP; the third and fourth chapters discuss, respectively, the development of decisions models and system dynamic models within the CPB; whilst the fifth and sixth chapters discuss technology and environmental policy.

The relevance of the cases chosen is tested on the basis of four criteria. First, I ask whether the issues motivating the development of the model or policy was broadly discussed. Second, I ask whether the motivating issue was novel. Third, I ascertain to what extent the resulting model or policy marks a break with previous planning and policy practices. Finally, I examine the extent to which the planning discourse or planning models show signs of a changing conception of historicity. Focussing on what was new in each development, these cases further help to demarcate the different periods that the chapters discuss. The resultant analysis examines, not how specific techniques are employed or how specific practices lead to specific results, but how new practices and techniques emerge.

The materials employed in my reconstruction of the practices are the documents that were exchanged between the members of the specific organisations under discussion. These can be (amongst others): research notes, graphs, datasheets, memos, reports, minutes, techniques, etc. Based on these materials, I reconstruct the development of the model or policy in question, determining what steps were taken and for what reason. The materials themselves were retrieved from the Dutch National Archives in The Hague, which contain all the archives of Dutch government organisations, including the planning bureaus. Throughout the unearthing process, I employed an Actor-Network Theory (ANT) approach,[158] starting with only a handful of documents and looking for traces and links to other documents. A research note can, for example, refer to a specific dataset, an internal report, a computer, or some other object, which I then retrieved from the archives if available (physical computers or the programs they ran are obviously [sadly] not part of the archive, but documents involved in their operations are). The second object subsequently contains more references, slowly building a network of references. The second question to ask in the context of the ANT method is how these networks are mobilised and to what end. Therefore, I have looked at how a set of techniques was used to convince certain actors that a certain action was necessary. Completing these two steps, the devel-

---

158  See for example: Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005).

opment of a model or policy can be mapped out, understanding the specific practices involved in their making.

The last step of my analysis is the coupling of the images resulting from the practices to the ideas and experiences of the authors from the first step. This is a relatively simple comparative process. As I have argued above, practices do not only lead to a specific action or development; they also produce images of society, the economy and the state. I have analysed these images to see if they contain elements of the ideas, images, affects, or experiences that my historical actors from the same period talk about. Like art criticism, this scanning is largely a matter of the trained eye: looking at the integrated image as a product of partial practices yet reflective of larger cultural currents; paying attention to the image's details, whilst determining the whole and the parts through the process of zooming in and out.[159] My eye is trained especially by surveying the bodies of literature on the topics at hand (referenced in the footnotes where relevant). The similarities uncovered form the basis for the overreaching themes and topics of the chapter around which my narrative is subsequently spun.

## 1.10 Contribution to the Existing Literature

The theoretical framework and the methodology of the thesis are firmly rooted in both the history of knowledge and intellectual history. These are neighbouring fields and, especially where topics are concerned that traditionally fall outside of the history of science, such as the humanities and political theory, they often overlap.[160] Addressing topics and issues from both fields might be at times awkward, although they usually flow naturally from one to the other. Issues of the state, social order, and scientific expertise have long been discussed in the history of knowledge and the related field of STS. Yet, in relation to issues of decision making, technocracy, and democratic legitimation, those very same issues also have a substantial lineage in intellectual history. Precisely by bringing those discourses together, my hope is

---

159  For the idea of the trained eye in the history of science, see: Ludwik Fleck, *Genesis and Development of a Scientific Fact*, ed. Thaddeus J. Trenn and Robert K. Merton, trans. Frederick Bradley (Chicago: University of Chicago Press, 1981), chap. 4 Section 2; Lorraine Daston, "On Scientific Observation," *Isis* 99, no. 1 (March 2008): 97–110, https://doi.org/10.1086/587535.
160  See: Suzanne Marchand, "Has the History of the Disciplines Had Its Day?," in *Has the History of the Disciplines Had Its Day?* (Oxford: Oxford University Press, 2014), 131–52, DOI:10.1093/acprof:oso/9780199769230.003.0007.

that this thesis can bring a novel contribution to the ongoing discussions in both fields. Mapping out the current debates for this section, I will stick to the usual distinction between both fields. However, for the larger part of the thesis, I pretend that such differences are not there. The resulting narrative sometimes makes large steps between fields, but it is my intent to show throughout this thesis that the topics and issues are closely intertwined.

The theory that I advance in this thesis is positioned as an alternative approach to the study of planning from the R-I model so prevalent in the history of knowledge and STS. The results will, therefore, first and foremost be of interest to scholars working in those fields concerned with planning or related topics, including the co-production of scientific expertise and social order, such as the state, sociotechnical governmentalities, and imaginaries.[161] The authors and topics (especially the models of the CPB) discussed will also be of relevance to scholars of the history of economic thought, which is traditionally not part of the history of science, but has in recent years moved closer to its neighbouring field.[162] Given the fact that the focus of these fields is science or scholarly practices, the discussions often lack a strong theoretical treatment of political concepts, such as the state, decision making, the public sphere, and democracy.[163] In fact, these fields often borrow from political theory to address those issues. By also including discussions from intellectual history, I will give political concepts the same treatment as the history of knowledge and STS give scientific concepts, revealing them as products of heterogenetic historical developments. Conversely, intellectual history often looks uncritically to scientific concepts and relies more on the (contemporary) public image of science rather than the actual historical activities of scholars.[164] Bringing in insights from the history of knowledge and

---

161  See: Sheila Jasanoff, ed., *States of Knowledge: The Co-Production of Science and the Social Order* (London: Routledge, 2004).

162  See: Margaret Schabas, "Breaking Away: History of Economics as History of Science," *History of Political Economy* 24, no. 1 (March 1, 1992): 187–203, https://doi.org/10.1215/00182702-24-1-187; Philippe Fontaine, "Other Histories of Recent Economics: A Survey," *History of Political Economy* 48, no. 3 (September 1, 2016): 373–421, https://doi.org/10.1215/00182702-3638607.

163  For example, the borrowing of Habermas' notion of the "public sphere" by Thomas Broman. See: Thomas Broman, "The Habermasian Public Sphere and 'Science *in* the Enlightenment,'" *History of Science* 36, no. 2 (June 1998): 123–49, https://doi.org/10.1177/007327539803600201.

164  John Tresch, "Cosmologies Materialized: History of Science and History of Ideas," in *Rethinking Modern European Intellectual History* (Oxford: Oxford University Press, 2014), 153–72, https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780199769230.001.0001/acprof-9780199769230-chapter-8.

STS will remedy this shortcoming.

Given the fact that the theory I propose is heavily based on the history of historiography, especially as advanced by Koselleck, Hartog, and Simon, the fruits of these investigations should also be of relevance to that field. I propose to approach the study of historiography and historicity with a broader scope, including the study of other scientific fields primarily concerned with historicity, such as future studies, futurology, and indeed, planning. In fact, broader approaches to the study of historicity that also include these fields have already emerged, mainly from the history of knowledge. Especially the work of Jenny Andersson features as an inspiration here.[165] Taking up these discussions in a framework from the history of knowledge, the study of historiography can be strengthened, not only by taking the ideas and experiences of time into consideration, but also by considering the methods, techniques, sources, affects, and networks of scholars engaged with historicity.[166]

Along the way, through the analysis of the authors and cases central to the individual chapters, more specific issues from these fields are discussed. These topics and issues are introduced in greater depth in the chapters themselves, so I confine myself here to a brief indication for each chapter. The second chapter dispels some myths on planning that are still prevalent in the history of economic thought and sheds light on how decision theory emerged from the field of welfare economics.[167] The third chapter delves into recent literature on Cold War rationality and decentres the dominant focus on the United States.[168] That which Philip Mirowski refers to as cyborg science—the weird mixing of political theory and computer metaphors—provides the fo-

---

165 Jenny Andersson, *The Future of the World, Futurology, Futurists, and the Struggle for the Post-Cold War Imagination* (Oxford: Oxford University Press, 2018). In addition, see also: Fernando Esposito, ed., *Zeitenwandel: Transformationen Geschichtlicher Zeitlichkeit Nach Dem Boom* (Göttingen: Vandenhoeck & Ruprecht, 2017); Dan Edelstein, Stefanos Geroulanos, and Natasha Wheatley, eds., *Power and Time: Temporalities in Conflict and the Making of History* (Chicago: University of Chicago Press, 2020); Assmann, *Is Time out of Joint?*

166 Herman Paul, "History and Philosophy of History (HPH): A Call for Cooperation," in *Philosophy of History: Twenty-First-Century Perspectives*, ed. Jouni-Matti Kuukkanen (London: Bloomsbury, 2021), 165–79, http://dx.doi.org/10.5040/9781350111875.0016.

167 For an overview of this discussion, see: Beatrice Cherrier and Jean-Baptiste Fleury, "Economists' Interest in Collective Decision after World War II: A History," *Public Choice* 172, no. 1–2 (2017): 23–44, https://doi.org/10.1007/s11127-017-0410-7.

168 For an overview, see: Joel Isaac, "The Human Sciences in Cold War America," *The Historical Journal* 50, no. 3 (2007): 725–46, https://doi.org/10.1017/S0018246X07006334.

cus of chapter four.[169] This chapter also discusses the impact of the Club of Rome and their *The Limits to Growth* (1972) on conceptions of the future and policymaking.[170] The rise of public choice and suspicion against bureaucrats is discussed in the fifth chapter,[171] whilst the sixth chapter comments on how STS conceptualises the policymaker-scientist interaction, and how the imaginaries of the state disappeared from public administration.[172]

Beyond STS, history of knowledge, and intellectual history, this thesis comments on a number of topics that are also of interest to other fields of history. The most prominent amongst them is the history of neoliberalism. The neoliberal turn in policymaking was, as I will argue, facilitated by economic planning. How this turn happed in the Netherlands over the course of the second half of the 20th century is one of the main threads running through this thesis. Serious historical research of the rise of neoliberalism in the Netherlands has only just begun and it is my belief that this thesis can provide a viable contribution to this emerging body of literature.[173] As this scholarship becomes relevant, especially in the final two chapters, I introduce the salient points of discussion and indicate where the gaps in existing literature exist that I hope to fill. Here I will also make comparisons with the neoliberal experience in other countries and indicate what the history of Dutch neoliberalism can add to international scholarship on the topic. More generally, this thesis can be read as a history of social and economic policy in the Netherlands from a very specific angle. Along the way, I will thus place some nuances to the existing literature on this topic.

---

169 For example: Philip Mirowski, *Machine Dreams: Economics Becomes a Cyborg Science* (Cambridge, UK: Cambridge University Press, 2002); Kyong-Min Son, "Cybernetic Freedom: David Easton, Systems Thinking, and the Search for Dynamic Stability," *American Political Thought* 7, no. 4 (Fall 2018): 614–45, https://doi.org/10.1086/699907.

170 For example: Elodie Vieille Blanchard, "Modelling the Future: An Overview of the 'Limits to Growth' Debate," *Centaurus* 52, no. 2 (2010): 91–116, https://doi.org/10.1111/j.1600-0498.2010.00173.x; Matthias Schmelzer, "'Born in the Corridors of the OECD': The Forgotten Origins of the Club of Rome, Transnational Networks, and the 1970s in Global History," *Journal of Global History* 12, no. 1 (March 2017): 26–48, https://doi.org/10.1017/S1740022816000322.

171 See: Colin Hay, *Why We Hate Politics* (Cambridge, UK: Polity, 2007); Peter Mair, *Ruling the Void: The Hollowing of Western Democracy* (New York: Verso, 2013).

172 See: Gürol Irzık and A. Faik Kurtulmu , "Votes and Lab Coats: Democratizing Scientific Research and Science Policy," *Metascience* 22, no. 1 (March 1, 2013): 45–61, https://doi.org/10.1007/s11016-012-9718-6.

173 For an overview, see: Merijn Oudenampsen and Bram Mellink, "De zichtbare hand: een historisch-sociologische benadering van neoliberalisme in Nederland," *Sociologie* 15, no. 3 (2019): 241–51, https://doi.org/10.5117/soc2019.3.001.oude.

# CHAPTER 2.

# Unhinged Modernity:
## Otto Neurath and Jan Tinbergen
## on Economic Planning, 1917–1945

*For me, the hallmark of democracy is the unity of two completely different moods that mutually determine each other. The one thing is indeed something soft and tender, that is, the love for humanity, the urge to help everything that suffers and is oppressed in this society. The other is something steel-hard. It is the piercing intellect and an incredible measure of courage, perhaps exuberance; to say: we will save them, quand même. I believe that the combination of these two qualities, that is the old ideal of chivalry that made the West great, is the first necessity for the betterment of this society.*

—Jan Goudriaan, *Lecture for the Society of Economics and Statistics* (1937)[1]

## Introduction

Whilst travelling through the United States in 1923, the Dutch-Austrian physicist Paul Ehrenfest wrote to his Amsterdam-based colleague Philip Kohnstamm to say how impressed he was with the practical physics training at the universities he was visiting. He approvingly noted how such pro-

---

[1] Vereeniging voor de Staathuishoudkunde en de Statistiek VSS, *Verslag van de Algemene Vergadering gehouden te Utrecht op zaterdag 30 october 1937* (The Hague: Nijhoff, 1937), 137; cited in: Marcel Boumans, "De contstructie van de samenleving; Tinbergen en de vroege planning," *Beleid en Maatschappij* 16, no. 5 (1989): 230.

grammes strongly fostered the bonds between science and industry. In the hope of learning how the ties between science and industry might be further strengthened, Ehrenfest was also keen to seek out the renowned inventor John van Heusen, a Dutch émigré who had, through his industrial applied inventions, made a fortune in the United States. Yet Ehrenfest was not uncritical of this practically-minded application of science, as he feared an "Americanisation" of physics. He worried that the value of science was in danger of being reduced to its effective application and, consequently, that science would lose its reflexive ability. There would be no place left to ponder the broader context in which questions of science were embedded. Only effect would matter, with physics constantly pushing for extremes in the pursuit of ever greater impact. Indeed, he had already noticed such an emerging attitude in American culture at large: He complained to his brothers about the utilitarian mentality and the predominance of action over thought. This "characteristic nature of the mechanism of American public opinion" troubled him immensely.[2]

Ehrenfest's rapprochement with industry on the one hand, and his critical stance towards the state of the physics profession on the other, are typical of the period between the two world wars, when scientists increasingly started to understand themselves as agents of modernity.[3] Ehrenfest saw great potential for the application of scientific rationality in many parts of society. He had great hopes for the establishment of a planned economy in the Soviet Union and even tinkered with the subject of economics himself for a while out of concern for the practical needs of impoverished conditions of the workers. At the same time, influenced by pessimistic cultural critics such as Max Nordau and Oswald Spengler, Ehrenfest feared that modern rationality would run amok, causing its own perversion and decline.[4] He noticed just such a perversion of rationality in the new generation of physicists, such as Werner Heisenberg and John von Neumann, who made use of excessively complex mathematical analysis, but whose physics, at least in the eyes of Ehrenfest, were devoid of any understanding. This ambiguity towards science's inherent modernism is what Frans van Lunteren and Marijn Hollestelle call

---

2 Cited in: Frans van Lunteren and Marijn Hollestelle, "Paul Ehrenfest and the Dilemmas of Modernity," *Isis* 104, no. 3 (September 2013): 512.

3 Lorraine Daston, "When Science Went Modern," *The Hedgehog Review* 18, no. 3 (Fall 2016).

4 van Lunteren and Hollestelle, "Paul Ehrenfest and the Dilemmas of Modernity," 527.

the modernist paradox.[5]

Moderating the modern abstract logic of science and contemplating once more the larger questions of scientific pursuit in relation to the fundamental questions of the human condition could only happen, according to Ehrenfest and his contemporaries, if scientists fostered new social commitments. Ehrenfest himself thought that this commitment could be cultivated through closer ties between science and industry. His students, however, gave a different interpretation of this commitment. David van Dantzig, Jan Burgers, Dirk Struik, and Jan Tinbergen all answered the call of modern science by becoming active socialists. Indeed, after the Second World War, this group of scientists would become central to the establishment of planning as a form of governmental practice.[6] This earnt Ehrenfest the nickname of the "Red Professor" at Leiden University, even if he never himself publicly professed socialist ideas.[7]

Ehrenfest and his students were not unique. In Great Britain, an influential group of scientists with socialist ideals had coalesced, comprising John Desmond Bernal, Joseph Needham, Patrick Blackett, and Hyman Levy, who similarly made a plea for economic planning.[8] Another well-known example could be found within the Vienna Circle, in which socialists such as Rudolf Carnap and Otto Neurath promoted the scientific worldview as a counterweight to the irrationality that held sway over Austrian politics at the time, especially the dangerous metaphysical ideas that, in their eyes, underpinned the rise of fascism.[9] Ehrenfest, Struiks, Bernal, and Neurath experienced modernity—the overreaching development of history—as colossal. Nothing was able to resist its force and nothing was able to escape it. However, these

---

5 van Lunteren and Hollestelle, 507.

6 A comparison of the different manners in which Ehrenfest's students tried to combine science and socialism can be found in: Gerard Alberts, "On Connecting Socialism and Mathematics: Dirk Struik, Jan Burgers, and Jan Tinbergen," *Historia Mathematica* 21, no. 3 (August 1994): 280–305; Gerard Alberts, "De opkomst van het wiskundig modelleren," *Nieuw Archief voor Wiskunde* 5, no. 1 (2000): 59–67; Geert Somsen, "Value-Laden Science: Jan Burgers and Scientific Politics in the Netherlands," *Minerva* 46, no. 2 (June 2008): 231–45. Tinbergen is often portraited as the odd one out since he seemingly completely embraced the tool-based idea of mathematics. As will become clear in this chapter, however, Tinbergen also sought a conception of science as a meaning-giving practice.

7 Alberts, "Socialism and Mathematics," 281.

8 Eric Hobsbawm, "Red Science," *London Review of Books* 28, no. 5 (March 9, 2006).

9 Donata Romizi, "The Vienna Circle's 'Scientific World-Conception': Philosophy of Science in the Political Arena," *HOPOS* 2, no. 2 (Fall 2012): 205–42, https://doi.org/10.1086/666659.

scientists did not experience the rationalisation of modernity as unfree. The alienating effects of modernisation could be warded off if rationalisation was embedded in the social values of the *life-world* (as Edmund Husserl called it).[10] There was still space to manoeuvre and set modernity on its right course. As I will argue in this chapter, socio-economic planning was born from this conception of modernity, in which science and politics were two realms of human activity that drove modernity forwards.

As I will show in this first historical chapter, early discussions on planning revolved around the idea of the scientist as an agent of modernity. The main aim of this chapter is to explore the multiple dimensions of this identification and to show how they structured the space in which interwar planning discussions took place. Using the analytic category of the *scholarly persona*—a concept that has recently gained popularity in the history of knowledge—I identify in the first three sections three relevant dimensions of the modern scholarly persona for the early discussions on planning: (a) the ambiguity or doubleness that many scientists felt towards modernity; (b) the wish to become socially committed; and (c) the incentive to mix political and scientific skills. In sections four and five, I use the writings of two economic planners to show in more depth how these three dimensions structured the evolution of early planning. Central to this discussion are Neurath and Tinbergen, who provide excellent exemplars of the planners of the time. In the final two sections, I discuss a complicating factor in this new scholarly persona, namely the conception of the state. The state was the obvious vehicle for planning programmes, yet Neurath and Tinbergen were wary of any wholesale embracing of state. Only with the rise of fascism did planners link their fate with that of the state.

The choice of Neurath and Tinbergen here is motivated by the impact they would later have on planning discourse in the Netherlands. As will be discussed in the following chapter, Tinbergen later founded the Dutch CPB and had an immense influence on how scientific expertise was institutionalised by the Dutch government. In contrast, Neurath's interactive and communicative ideals of planning seemed to have disappeared after his death in 1945, but made a strong comeback in the 1960s when a new generation of planners made comparable arguments—as will be discussed in chapter four. The comparison between the two thinkers is also motivated on a more structural level. Both shared similar backgrounds and concerns, yet ultimately

---

10 Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*, trans. David Carr (Evanston, IL: Northwestern University Press, 1970).

proposed different solutions to planning matters. Comparing their trajectories will, therefore, shed light on the diverging paths that existed within broader planning discourse. Neurath, informed by his Austrian-Hungarian background, never fully committed to the idea of the state, but rather sought the peaceful co-existence of different cultures, ethnicities, nationalities, and religions via their shared commitment to neutral norms. Tinbergen, operating in the less state-adverse and more German-influenced Netherlands, embraced the state more fully towards the end of the interwar period. As such, the similarities and differences between the two foreshadow many of the later tensions that were to emerge within the realm of planning discourse.

For the reconstruction of the scholarly persona of the period in general, I will draw on secondary literature on the image of the scholar in German-speaking countries and the Netherlands, whilst using the writings of Max Weber and Husserl as two prime examples of the struggle for this new identity. The analysis of the works of Neurath and Tinbergen is done on the basis of their published works. In addition, I have used Neurath's correspondence with Ferdinand Tönnies to contextualise his ideas on planning, and the publications of the Dutch Social Democratic Workers' Party (*Sociaal-Democratische Arbeiders Partij*, SDAP) to contextualise that of Tinbergen.

Analysing the early planning thought of Neurath and Tinbergen in the context of a conceptualisation of modern historicity will dispel a pervasive myth of planning, and progressive politics in general, namely the idea that planning presented the future as an "empty canvass" upon which scientific experts could project their dreams of the ideal society without any practical constrains, messy reality, or conflicting values. In contrast to Reinhart Koselleck, I will argue planning was neither utopian, nor the undesirable product of an imagined and unbridgeable gap between the space of experience and the horizon of expectation.[11] Rather, planning theories were based on a historical sense that linked past, present, and future to an observable development. Negative stereotypes of planning as utopian thought, its supposedly totalitarian tendencies, limitless coercion by the central state, and disregard for individual autonomy simply do not apply.

The pervasiveness of this myth, and how it led to profound misunderstandings, is illustrated in the following quotations taken from the work of two eminent scholars on economics and society of the interwar period.[12] In

---

11 Reinhart Koselleck, "The Temporalization of Utopia," in *The Practice of Conceptual History: Timing History, Spacing Concepts*, trans. Todd Presner (Stanford, CA: Stanford University Press, 2002), 84–99.

12 James C. Scott offers a similar negative characterisation. Two other examples

his *Strategies for Economic Order* (1995), Keith Tribe characterises Neurath's theories of economic planning as absolutist, and fundamentally unaware of the dangers of planning:

> His work, [...] expresses the manner in which modern rationalism is a product of the Enlightenment. This is its characteristic and its limit. It appears eccentric to us not because it is anachronistic, but because of the relentless manner in which it pushes a form of rationalism to this limit. That modern men could find themselves caught up in a new form of absolutist rule was not something which Neurath could easily comprehend.[13]

Similarly, Marcel Boumans characterises Tinbergen's econometric models from the 1930s as an elitist and technocratic programme:

> Tinbergen's program in the 1930s is, therefore, a program in which society is regarded as a closed system. That is, he believed in the possibility that society could be crammed into a logically closed model, which could then be manipulated. Based on technical knowledge of such systems, an economic council [of scientific experts] derived the right to steer and control society from a position outside and superior to that system.[14]

For Tribe and Boumans, the planning of the interwar years was the result of a grotesque overconfidence in Enlightenment reason and modern science that conceived of the whole of society as calculatable and controllable, completely blind to the totalitarian tendencies inherent in such an absolute dedication to rationality. My hope is that this chapter will dispel these mischaracterisations. Furthermore, this chapter has two additional aims. First, to illustrate a central claim of the previous chapter, namely that planning is fundamentally a historical science. Second, it shows the historical origins of the analytical notion that I will employ throughout this

---

of scholars with a similar view are: David M. Levy and Sandra J. Peart, *Escape from Democracy: The Role of Experts and the Public in Economic Policy* (Cambridge, UK: Cambridge University Press, 2016), https://doi.org/10.1017/9781316499078; Erwin Dekker, "On Emancipators, Engineers, and Students: The Appropriate Attitude of the Economist," *The Review of Austrian Economics* 33, no. 1 (March 1, 2020): 61, https://doi.org/10.1007/s11138-019-00439-y.

13  Keith Tribe, *Strategies of Economic Order: German Economic Discourse, 1750-1950* (Cambridge, UK: Cambridge University Press, 1995), 168.

14  Marcel Boumans, "De Slinger van Tinbergen," *Tijdschrift voor politieke ekonomie* 13 (1990): 63.

thesis: that of the *decisionist imaginary*.

## 2.1 The Scholarly Persona: Bildung and Modernism

Theoretic debates on planning emerged at a time when scholars started to critically re-evaluate their relation to society. As the examples of Ehrenfest, Bernal, Neurath, and Tinbergen already attest, the core of this re-evaluation was the ideal of science as part of the process of modernisation, as well as a feeling of uneasiness towards that very same modernity.

The identification of science with modernity and the accompanying sense of unease indicate a specific experience of time invoked by large-scale historical events in relation to the modern conception of progress. The First World War problematised the idea of national science and the idea that the progress of technology would lead to a reduction in human suffering. Furthermore, within scientific discourse itself, innovations such as Albert Einstein's theory of relativity and the rise of quantum physics led to the feeling that the underlying world picture of science was drastically shifting.[15] These were unsettling events for scientists who questioned the modern scientific endeavour at its core. As I will argue, two main feelings prevailed: first, the sense that scientific conduct was subject to a much faster change then previously conceived, and that modernity had swept away the fundaments of science; second, that the fundamental social bonds that had traditionally governed society were disappearing. The result was a re-conceptualisation of modern historicity I have coined *unhinged modernity*. This conception reflects a singular horizon of history as the development of a modernity primarily understood as a process of rationalisation: an unstoppable force that would fundamentally alter everyone and everything. It was a positive force, decreasing historical human suffering; but also a negative force, alienating the individual and undoing the humanist concerns that had driven modernity in the first place. In short, this conception of historicity was a narrative in which the scientist could direct modernity towards its humanitarian promise, whilst averting its negative consequences.

Investigating how this conceptualisation of historicity led to a new self-understanding of the scientist, this first section investigates why and how scientists started to conceive of themselves as agents of modernity in the first place, whilst the subsequent section discusses how this self-understanding led to social commitments. Investigations into the self-understanding of

---

15  Daston, "When Science Went Modern."

scientists have taken off in recent years with a rapid burgeoning of literature on the *scholarly persona* or *scholarly self* in the history of knowledge.[16] The scholarly persona is usually understood to be the ideal type that describes the personality or persona of the scholar—those virtues, ambitions, values, exemplars, sensibilities, and desires that constitute the scholarly identity. This persona plays a vital role in the nature and production of scholarly knowledge, as well as the communication between the scholar and other audiences. I will use this notion in particular as a heuristic device in the analysis of the planning theories of Neurath and Tinbergen in the later sections of this chapter.

As David Baneke describes, when, between 1901 and 1913, four Dutch physicists won the Nobel Prize, the national press started to talk about a second "golden age" of Dutch science that could rival the first—that of Christiaan Huygens, Simon Stevin, and Antoni van Leeuwenhoek. The key to this success, commentators of the period argued, was not the pioneering spirit of the Dutch scientists, but rather that they worked with great effect in research fields that had already been established. Guiding this unadventurous yet diligent effort were the scientific virtues of perspicacity, reliability, perseverance, and exactness. Unsurprisingly, these were also the virtues associated with Calvinism which, according to the commentators, formed the bedrock of the national spirit at that time.[17]

As this example shows, in the Netherlands from before the First World War, science and society were intimately connected through the notion of national culture. The virtues that were associated with the scientific self were also those that formed the spirit of the nation. In addition to their specialist training, academic scholars had often received a broad education on the higher cultural aspects of a nation, focussed on the development of their personality. Through this cultivated personality, it was thought, scholars were considered capable of speaking for the whole of their culture through their scientific endeavours. Such a broad cultural education and personal ethic is now often associated with the German *Bildung* ideal, or *Bildungs-*

---

16 See: Lorraine Daston and H. Otto Sibum, "Introduction: Scientific Personae and Their Histories," *Science in Context* 16, no. 1 (2003): 1–8, https://doi.org/10.1017/S026988970300067X; Herman Paul, "What Is a Scholarly Persona? Ten Theses on Virtues, Skills, and Desires," *History and Theory* 53, no. 3 (2014): 348–71, https://doi.org/10.1111/hith.10717; Gadi Algazi, "Exemplum and Wundertier: Three Concepts of the Scholarly Persona," *BMGN - Low Countries Historical Review* 131, no. 4 (2016): 8–32, https://doi.org/10.18352/bmgn-lchr.10262.

17 David Baneke, *Synthetisch denken: Natuurwetenschappers over hun rol in een moderne maatschappij, 1900-1940* (Hilversum: Uitgeverij Verloren, 2008), 119.

*bürgertum*—the ideal of a culturally educated elite of civil servants.[18] This German ideal left strong marks on Dutch thinking about the scholarly self at the turn of the century.[19]

Yet following the horrors of the First World War, such nationalist ideals suddenly appeared very backwards, and a whole new generation of scholars sought to disconnect themselves from a national culture that had turned young man into murdering machines.[20] Part of this suspicion towards the culture of nationalism was aimed at the *Bildung* ideal itself. In the decline of these ideals, another narrative, this time concerned with the nature of the scientific endeavour itself, came to the fore, conceptualising science as part of modernity.[21] Such ideas had already begun to emerge at the end of the 19th century,[22] yet by associating science with a modernity set against culture in the interwar period, scientists tapped into a debate on the supposed duality between culture and civilisation, or community and society, that had been flourishing under the influence of work by, amongst others, Ferdinand Tönnies' *Community and Civil Society* (1887), and Spengler's *Decline of the West* (1922).[23] These authors not only described the process of modernisation as

18 *Bildung* is a bit of a misnomer, since the discourse on *Bildung* as an educational ideal only emerged in the 1960s and was projected backwards as a means to understand nearly a century of relationships between German universities and states. However, for lack of a better term, I will stick with it. For a deeper examination of *Bildung*, see: Fritz K. Ringer, *The Decline of the German Mandarins: The German Academic Community 1890–1933* (Cambridge, MA: Harvard University Press, 1969), 86–90. For the problems of using the term historically, see: Johan Östling, *Humboldt and the Modern German University: An Intellectual History* (Lund: Lund University Press, 2018), chap. 3.

19 Baneke, *Synthetisch denken*, 193.

20 Many more factors can be identified to explain the disappearance of the natural association between science and culture, however, this lies beyond the scope of this chapter, see: Geert Somsen, "Scientists of the World Unite: Socialist Internationalism and the Unity of Science," in *Pursuing the Unity of Science: Ideology and Scientific Practice from the Great War to the Cold War*, ed. Harmke Kamminga and Geert Somsen (London: Routledge, 2016), 83–104.

21 Another factor to take into consideration is, as Fritz Ringer points out, that with the industrialisation of Germany, a new class of scientific experts—sociologists—started to challenge the ruling elites of the *Bildungsbürgertum*, see: Ringer, *German Mandarins*, 241–52. For a comparable case in France, see: Wolf Lepenies, *Between Literature and Science: The Rise of Sociology* (Cambridge, UK: Cambridge University Press, 1992).

22 Lorraine Daston, "When Was Modernity, and Why Do We Care?," in *The Moderns: Wie Sich Das 20. Jahrhundert in Kunst Und Wissenschaft Erfunden Hat*, ed. Cathrin Pichler and Susanne Neuburger (Vienna: Springer, 2012), 143–59.

23 Baneke, *Synthetisch Denken*, 39; Frederick C. Beiser, "Weimar Philosophy and the Fate of Neo-Kantianism," in *Weimar Thought: A Contested Legacy*, ed. Peter E.

a transition from culture towards civilisation—from community to civil so-
ciety—but also, to varying degrees, critiqued modernity and lamented the
disappearance of older values trampled underfoot by a cold, anonymous,
and crowded modernity. Scientists started to associate themselves with the
movement towards civilisation and pushed against the defenders of tradition
and culture, especially those scholars who researched humanistic knowl-
edge and were closely associated with the *Bildungsbürgertum*. However, as
Ehrenfest's sentiments suggest, and as quoted in the introduction, scientists
did not simply become the defenders of civilisation and modernity against
culture and community. Rather, they internalised the criticism implicit in
the distinction between culture and modernity as such and instead tried to
overcome the presumed divides between community and civilisation, and
between tradition and modernity.

The most famous expression of this sentiment came quite early in Max
Weber's famous lecture from 1917, *Science as Vocation*. In this lecture, Weber
addressed the question: "Why pursue an academic career?" However, it can
equally viably be read as a text on the proper virtues, ambitions, hopes, and
(des)interests of the modern scientist. Over-analysed perhaps, the lecture
remains a seminal text on the scholarly persona of the period and therefore
provides the perfect resource with which to illustrate my point. Addressing
what is precisely "modern" in modern science, Weber gave one of the most
pertinent characterisations of the process of modernisation:

> [W]e could learn at any time that there are, in principle, no mysterious
> unpredictable forces in play, but that all things—in principle—can be
> controlled through calculation. This […] means the disenchantment of
> the world. No longer, like the savage, […], do we have to resort to magical
> means to gain control over or pray to the spirits. Technical means and
> calculation work for us instead.[24]

Although this process of control and calculation was broader than science
alone, the nature of scientific investigation answered the same logic. As a

---

Gorden and John P. McCormick (Princeton, NJ: Princeton University Press, 2013),
115–32; Paul Forman, "Weimar Culture, Causality, and Quantum Theory, 1918–
1927: Adaptation by German Physicists and Mathematicians to a Hostile Intellectual
Environment," *Historical Studies in the Physical Sciences* 3 (1971): 30–37, https://doi.
org/10.2307/27757315; Ringer, *German Mandarins*, 83–102.

24  Max Weber, "Science as Vocation," in *Max Weber's Complete Writings on Academ-
ic and Political Vocations*, ed. John Dreijmanis, trans. Gordon C. Wells (New York:
Algora Publishing, 2008), 35.

consequence of this modernisation process, science had lost its relevance for broader questions pertaining to the meaning of life. Whereas for the ancient Greeks, science "seemed to show the way to know and to teach how to act rightly in life, and especially as a citizen",[25] modern science, in contrast, no longer revolved around fundamental "why" questions:

> All the natural sciences give us an answer to the question: What should we do if we want to gain technical control of life? But whether or not it is right to gain such technical control, and whether or not we want to do so, and whether or not, in the final analysis, it really makes sense to do so, are questions that they leave unanswered.[26]

The invocation of the Greek ideal was no coincidence. The *Bildung* ideal, to which Weber was implicitly reacting, often took classic Greek culture as an example, and Weber's description meets the *Bildungsbürgertum* ideal just as well as the Greek past.[27] In contrast to what some of his colleagues in the humanities (on which later more) and Ehrenfest feared, Weber did not lament this break by science with the meaning of life. Studying science meant cutting oneself loose of the larger questions of life. In that sense, modern science did not only mean committing to the forces of rationalisation, but also the undermining of the "natural" ties between science and national culture, admitting that rationalising undid the "traditional" position of the scientist in society. Social commitments, in Weber's view, had to be relegated to the internal empire of the scholar's subjective value commitment. Science that engaged too deeply with value judgements would lose precisely that which made modern science such a worthwhile endeavour—its clarity, progress, and reflection on goals and the legitimisation of its results. Hence, the persona of the modern scientists should be teachers, not leaders, abstaining from value judgement in their scientific work, motivated solely by the will to know and not by fame, fortune, or the search for spiritual meaning.

Although for this reason Weber urged his fellow professors to refrain from making political statements in the lecture hall, his own lecture was not entirely free from implicit value judgements either. The lecture started with a comparison between the American and German academic systems. The US system, Weber asserted, "is the same as it is wherever capitalist business

---

25  Weber, 37.
26  Weber, 40–41.
27  For an extensive analysis of how Weber reacted against the *Bildung* ideal in his work, see: Ringer, *German Mandarins*, 176–80.

operates: the separation of the worker from the means of production".[28] As with Ehrenfest five years later, Weber was wary of too practical an application of science: "It is futile to rely entirely on mechanical assistance" for the fundamental insights of science.[29] Moreover, he berated the attitude of the American student: "His view of the teacher standing in front of him is: He sells me his knowledge and methods for my father's money, just as the retailer sells my mother the cabbage."[30] The US system would thus reduce scientific knowledge to practical rules and commodities completely. Consequently, his lecture also functions as a warning against the "Americanisation" of German academia. Although refraining from value judgments, it was vital for modern scientists—if indeed their knowledge was not to be reduced to pure practical effect—to remain committed to their own morals, scholarly persona, and vocation (*beruf*).[31]

## 2.2 Unhinged Modernity

With the disappearance of national culture as an encompassing ideal of the relationship between science and society, scientists adopted a scholarly persona closely associated with modernisation. In other words, they became modernists.[32] Yet part of this persona was an abhorrence of modernity as well. Although paradoxical, this was not a contradiction, as I will argue in this section.[33] Modernity was a force of good, but had, of late, gone astray. It was the calling (*beruf*) of the scientist to bring modernity back on track. As I will argue in the next section, this dynamic of modernism can be understood as a reaction to a specific experience of time as modernity. It is against this background that the ideal of the technocrat became part of the scholarly persona of so-called "plan economists".

---

28  Weber, "Science as Vocation," 27.

29  Weber, 31.

30  Weber, 46.

31  Weber, 25.

32  For the association between the philosophy of science and modernism, see: Peter Galison, "Aufbau/Bauhaus: Logical Positivism and Architectural Modernism," *Critical Inquiry* 16, no. 4 (1990): 709–52, https://doi.org/10.1086/448557.

33  The analysis of the scholarly self and scientific expertise in relation to the "paradox of modernism"—which is both the celebration and discontent of modernity—is already a firmly established topic of discussion in the history of culture. See especially: Marshall Berman, *All That Is Solid Melts into Air: The Experience of Modernity* (New York: Penguin, 1988).

Modernity is a broad and rather vague notion. It is seemingly ubiquitous, and consequently, neither the scientists of the period nor its present-day commentators are very precise about its meaning.[34] Therefore, it poses something of a challenge to speak about the scholarly persona of interwar scientists as modernists. Instead of tackling this challenge with a working definition, I will adopt a strategy from one of the most well-known books on the scholarly self: Lorraine Daston and Peter Galison's *Objectivity* (2007). Daston and Galison argue that the acceptance of objectivity as an epistemic virtue was motivated by the fear of its opposite: subjectivity.[35] Understanding objectivity thus first and foremost entails understanding the history of subjectivity and why it frightens scholars so much. In short, understanding the fears of scholars is a worthwhile strategy via which to uncover the scholarly persona. In this section, I will focus on two specific fears: the fear for a world governed by rules and the pure application of knowledge; and the fear of knowledge being too cold, abstract, ridged, and devoid of (any) meaning. These fears, I later argue, not only provide insights into the experience of modernity itself, but also explain the form the ideal of technocracy took.

As the starting point for my investigation into the fear of the modern, I return to the example of Weber's lecture above. Weber names the process that drives modern disenchantment with the world "rationalisation"—a process that also drove the increased bureaucratisation and industrialisation of society. As noted above, Weber characterised modern science, in its American context, in economic notions such as "the means of production". Likewise, the practical ideal of science was described using the metaphor of the factory: "an arithmetical calculation, which can be manufactured, as 'in a factory,' in laboratories, or statistical card index systems, by cool reason alone and not with the whole of one's 'soul'".[36] This connection between the working of science and industry signalled the newly emerging notion of rationality.

In the interwar period, economics literature increasingly began to mention the notion of "rationalisation" to denote precisely the division of labour, automation, and the increase in efficiency that occurred in the organisation

---

34 This is not a critique. The research into the topic is justified by the fact that "modernity" was a very important notion to the scientists of the time. In order to map the discourse is all its rich facets, historians can do nothing but abstain from giving a precise definition in advance.

35 Lorraine J. Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007), 35–42.

36 Weber, "Science as Vocation," 31.

of factories.[37] Scientific management or Taylorism spurred the imaginary of rationalisation being akin to the workings of a factory floor. Frederic Taylor had proposed a precise and empirical approach to the labour process, in which the process should be analysed and broken down into tasks that were as small as possible—described as repetitive, rule-bound procedures. Divided into these small elements, the simplest tasks could then be automated, workers each given one specific task. In that manner, managers could control the whole of the production process like a machine, tinkering with the cogs (i.e., the workers with their individual tasks) to increase productivity.[38] It was this image of rationalisation as a factory floor that invoked such abhorrence amongst scholars, as Weber's denunciation of American science shows. Although science was driven by the same logic, scholars found it unacceptable that knowledge production could become fully automated and ruled by impersonal repetitive procedures.

This image of rationalisation as a factory floor also became strongly associated with economic planning. Planning, it was argued, sought to rationalise society by organising markets as a single business, which would consequently increase the efficiency of the economic system.[39] In fact, planners embraced this image. As I will show in the fifth section, early Dutch planners such as Willem Bonger, Jan Goudriaan, and Theo van der Waerden promoted the idea that rationalisation would lead to the improvement of workers' lives, as they would share in the increased wealth created and work fewer hours. The flipside of this image was the significant danger that society would become a machine with individuals as the cogs.

As Paul Erickson, Judy Klein, Lorraine Daston, and others argue in *How Reason Almost Lost its Mind* (2013), the association of rationality with the repetitive tasks of the factory floor was a relatively new idea when Weber gave his lecture. Indeed, no such connection can be found before 1900.[40] What

---

37  Peter Rodenburg, "Rationalization and the 'Engineer-Economists' in the Netherlands, 1920—1940," *Research in the History of Economic Thought and Methodology* 36B (2018): 42.

38  Harry Lintsen and Rienk Vermij, "Ingenieurs en het Streven naar Technocratie," in *De opmars van deskundigen: Souffleurs van de samenleving*, ed. Frans Van Lunteren, Bert Theunissen, and Rienk Vermij (Amsterdam: Amsterdam University Press, 2002); André Luwel, *De technocratie: theorie en beweging* (Kampen: Kok Agora, 1980).

39  Charles S. Maier, "Between Taylorism and Technocracy: European Ideologies and the Vision of Industrial Productivity in the 1920s," *Journal of Contemporary History* 5, no. 2 (1970): 27–61.

40  Paul Erickson et al., *How Reason Almost Lost Its Mind: The Strange Career of Cold War Rationality* (Chicago: University of Chicago Press, 2013), 38–44.

supposedly bound the two together was a new notion of the application of rules, with "application" understood in this context as rule-following and opposed to informed judgement. Previously, applying a rule could entail the application of a previous example in a new context—an action that partly relied on the insight and capacity to judge on the part of the person who applied the rule, or what Weber called judging with "the whole of one's 'soul'".[41] Applying rules in the 20th century, however, increasingly started to mean performing a mindless mechanical task in which predetermined procedures had to be followed.[42] Interwar scholars, particularly those in Germany, but also those in the Netherlands and Austria, became obsessed with this new interpretation of rules, especially its negative connotations. They feared a world governed by such rules—a theme that can be found across the work of a diverse set of authors, from Carl Schmitt and Ludwig Wittgenstein to Johan Huizinga and Otto Neurath.[43] They worried that such rules would trump the spontaneity of action, kill off the element of play, and made purely political decisions impossible. Decisionism, as discussed in the first chapter, with its insistence on deciding the exception rather than the rule, could be interpreted as an expression of "rule phobia".[44]

    Daston and Galison argued that the adaptation of objectivity as an epistemic virtue by scholars in the middle of the 19th century was spurred by the fear that if the faculties of the human mind were not tamed by the waking reason, science and the humanities would be led astray by fantasies.[45] "The sleep of reason produces monsters", as the inscription of Francisco Goya's famous "Capricho 43" warns us. As Weber asserted and Ehrenfest reiterated,

---

41  Weber, "Science as Vocation," 31.

42  In relation to the shifting notion of "rules", see also: Lorraine Daston, "Calculation and the Division of Labor, 1750—1950," *Bulletin of the German Historical Institute* 62 (Spring 2018): 9–30.

43  Carl Schmitt, *Political Theology: Four Chapters on the Concept of Sovereignty*, trans. George Schwab (Cambridge, MA: MIT Press, 1985); Ludwig Wittgenstein, *Philosophical Investigations*, trans. Elizabeth Anscombe (Oxford: Basil Blackwell, 1953); Johan Huizinga, *Homo Ludens* (Boston, MA: Beacon Press, 1955); Otto Neurath, "Pseudorationalism of Falsification," in *Philosophical Papers 1913–1946*, trans. Robert S. Cohen and Marie Neurath, Vienna Circle Collection (Dordrecht: D. Reidel Pusblising Company, 1983), 121–31.

44  Schmitt, *Political Theology: Four Chapters on the Concept of Sovereignty*, 48; John P. McCormick, *Carl Schmitt's Critique of Liberalism: Against Politics as Technology* (Cambridge, UK: Cambridge University Press, 1997), 83–117; Jan-Werner Müller, "Myth, Law and Order: Schmitt and Benjamin Read Reflections on Violence," *History of European Ideas* 29, no. 4 (2003): 459–73, https://doi.org/10.1016/j.histeuroideas.2003.08.002.

45  Daston and Galison, *Objectivity*, chap. 4.

scholars in the interwar period were afraid that even waking reason might produce monsters. Scientists that were simply impartial, disinterested, cool, distant, detached from earthly desires, and sober could still lack the true scientific insight that science needed. Moreover, such an objective scholar could still reduce science to pure application or economic commodity. The nightmarish vision of a scientist simply following the rules was fuelled by the vision of the impoverished working conditions of the modern factory labourer. Industrialisation had reduced the worker to doing repetitive, rule-following tasks, a mere cog in the machine, alienated from its own labour. Scholars feared that science, as an agent of rationalisation, would do the same for the whole of society, turning society into a machine with dehumanised atomised individuals, alienated from themselves and their environment. It was the dark side of modern society that authors such as Ferdinand Tönnies had stressed.[46] As an agent of this process of rationalisation, science, if it was not careful, would only serve to further alienate society.

Weber had described the process of rationalisation as one in which "Western" science had to break loose of its initial natural bond with questions of the meaning of life and politics. In the reverse of Plato's cave metaphor, scientific truth was not that of the sun and the outside world, but rather the abstract shadows on the cave wall. Scientists seldom had a direct image of their research object and had to infer attributes through indirect "shadowy" phenomena.[47] However, this new image of scientific enterprise was not embraced by everyone. For example, Edmund Husserl linked this shadowy vision—in which scientists were expressing their knowledge in abstract mathematical formulas seemingly devoid of anything resembling the everyday experience—with the so-called "foundations' debates" that occurred within mathematics, theoretical physics, economics, philosophy, and history in the first half of the 20th century.[48] The sciences were in crisis, asserted Husserl. Their previous foundations had become too shadowy, devoid of any daylight, and the sciences and humanities were desperately searching for new ground to stand on.

As Husserl's writings indicate, the fear of rules and a cold and meaningless world were not only induced by major political events. Rather, they were also a product of the scholarly debates of the time. They point to a specific

---

46 Ferdinand Tönnies, *Community and Civil Society*, ed. Jose Harris, trans. Jose Harris and Margaret Hollis, Cambridge Texts in the History of Political Thought (Cambridge, UK: Cambridge University Press, 2001), 8.

47 Weber, "Science as Vocation," 36–37.

48 Husserl, *Crisis of European Sciences*, 3–5.

experience of singular time and a reaction to an emerging conception of historicity. As already noted, the horrors of the First World War threw the connection between science and national culture into question. It also problematised the idea that technological progress would entail political or humanitarian progress. Similarly, within science, modernity's sweeping power became noticeable. Scientific theories no longer seemed stable and cumulative when Einstein's relativity theories drastically reinterpreted Newtonian physics. Scientists became aware of the fleeting nature of their knowledge. Modernity would not only structurally alter society; it would also fundamentally alter science.[49] In the wake of quantum theory, physics became increasingly more mathematical. Ehrenfest feared that he would no longer be able to keep up with the more complex mathematics the new generation of physicist were practising.[50] Indeed, so strong was this fear that it contributed to the recurrent bouts of major depression he suffered, providing a very dramatic example of personal crisis when faced with the experience of modernity.[51]

Physics was not unique in this regard. New complex mathematics also emerged in economics, where older attempts to measure utility through psychological methods became discredited.[52] In the humanities (which in the Dutch- and German-speaking world was not distinguished from the sciences), the methods and meaning of history were accused of being relativistic in the so-called *crisis of historicism*.[53] If historians only studied a past that was radically different from the lived experience of the present, what could still be learned from the past? Would the positivist epistemological underpinnings of historical research not be undermined if the conclusion of historical research was that each period had its own standards for morals and knowledge? Similarly, the idea of religious experience was discredited as the fundamental principle of religion studies (*Religionswissenschaften*).[54] If religion

49 Daston, "When Was Modernity," 147–52.

50 van Lunteren and Hollestelle, "Paul Ehrenfest and the Dilemmas of Modernity," 506.

51 For example: Dirk van Delft, "Paul Ehrenfest's Final Years," *Physics Today* 67, no. 1 (January 2014): 41–47, https://doi.org/10.1063/PT.3.2244.

52 Ivan Moscati, *Measuring Utility: From the Marginal Revolution to Behavioral Economics* (Oxford: Oxford University Press, 2018), chap. 4.

53 Ernst Troeltsch, "Die Krise Des Historismus," *Die Neue Rundschau* 33 (1922): 572–90; Charles R. Bambach, *Heidegger, Dilthey, and the Crisis of Historicism* (Ithaca: Cornell University Press, 1995).

54 Samuel Moyn, "From Experience to Law: Leo Strauss and the Weimar Crisis of the Philosophy of Religion," *History of European Ideas* 33, no. 2 (June 1, 2007): 174–94, https://doi.org/10.1016/j.histeuroideas.2006.11.004.

studies could no longer investigate the experience of God, even indirectly, what then was its proper research object? Being an agent of modernity was a scary affair when everything that once held true in science "melted into thin air".[55]

The problem was, Husserl wrote in *The Crisis of European Sciences* (1936), precisely the break of modern science with the broader questions of life and everyday experience. Husserl believed, as had Weber, that "Western" science and the world of everyday experience—what he called the *life-world*—were once intimately connected.[56] The question that drove science even to this day emerged somewhere in the past from the experiences in the life-world. At the same time, scientific knowledge could only gain its potent objective form by breaking away from the life-world. However, modern science had gone too far: Not only had it broken away from the life-world, but it had also forgotten the initial experience of the life-world that had spurred scientific pursuit in the first place. Weber simply asserted that it was in the nature of modern science that the structure within scientific knowledge was not part of scientific investigation itself: Scientists simply had to narrow their view to do science. He linked the foundations of modern science to the development of rationalisation. Returning to the life-world was unnecessary, since science already gained its historical meaning through this development. Husserl, in contrast, argued that the historical meaning of science was predicated on the meaning of events and experiences of the past that fell outside of the development of rationalisation. Consequently, science lost its meaning when it could not look beyond the shadowy realm of abstract knowledge. This loss of meaning led to a disappearance of the foundations of science. That is to say, science could no longer account why a basic assumption was taken to be self-evident.[57] What Husserl described as modern science relying too much on its abstract knowledge and therefore losing its foundations, was very much related to the fear of rules described above. Both assessments pictured rationalisation as inevitable and a liberation of earlier forms of superstition, but also as a force that had "swallowed its own children", undoing human subjectivity and undermining its own foundations.

---

55 This is a paraphrase of Marx and Engels' famous expression, see Karl Marx and Friedrich Engels, "Manifesto of the Communist Party," in *Later Political Writings*, Cambridge Texts in the History of Political Thought (Cambridge, UK: Cambridge University Press, 1996), 4. The notion was also famously used by Marshal Berman for his book on modernism, see: op. cit. 32.

56 Husserl, *Crisis of European Sciences*, 6.

57 Husserl, 18.

However, the latter part of an "unhinged modernity" was not inevitable, and Husserl sought to put rationalisation back "on its hinges" to retrieve the historical meaning of science.

Husserl's answer to unhinged modernity was an appeal to the sciences and humanities to retrieve the initial experience of the life-world that provided the foundations of scientific knowledge with self-evidence: its so-called *historical apriori*.[58] The historical apriori would connect the past of the sciences to their present practices, thus giving them meaning again. Furthermore, this entailed connecting the naturally meaningful word of everyday life with the abstract detached logic of science again—a connection that was natural in the past, but had gone missing in modernity—without reducing one form of knowledge to the other.

Husserl was not alone in such an appeal. In the Netherlands, this quest for a recommitment to the social life-world took shape in the so-called "synthesis" movement. Inspired by Hegelian ideas, Dutch scientists started to look for theories that could encompass science, religion, morality, society, and the human mind. However, this was not purely a theoretical endeavour, and it was considered a means by which to reinstate the sciences' humanity in order to show "the human face of the scientists again", as the physicist Philip Kohnstamm (whose correspondence with Ehrenfest was referenced in the introduction) suggested.[59] Unlike Husserl and Weber, the Dutch synthesis movement saw this bringing together of science and the life-world as a public task in which scholars had to take responsibility for the state of society. The synthesis movement thus had a double intent: it called both for the practical application of science to the betterment of society; and for a broader understanding of scientific knowledge that could also encompass questions of the meaning of life.

The conceptualisation of unhinged modernity entailed a double evaluation of modernity. Modernity was a problem that invited many solutions. For example, as Erwin Dekker has recently argued, members of the Austrian School of Economics treated modernity as a patient.[60] Unlike Husserl or the synthesis movement, figures such as Friedrich Hayek and Karl Popper pro-

---

58 Edmund Husserl, "The Origin of Geometry," in *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*, trans. David Carr (Evanston, IL: Northwestern University Press, 1970), 353–78.
59 Baneke, *Synthetisch denken*, 139.
60 Erwin Dekker, *The Viennese Students of Civilization: The Meaning and Context of Austrian Economics Reconsidered* (Cambridge, UK: Cambridge University Press, 2016), chap. 2.

moted a distanced attitude, observing modernity's ills and hoping, through a policy of non-intervention, that the sick part of society would die off. Like Weber, they hoped through study to cultivate an inner sense that would carry the values of civilisation. As I will show in the second part of this chapter, Neurath and Tinbergen took a very different route. For them, like Husserl, the life-world had to be connected to abstract economic knowledge again. Economic planning could only succeed, they argued, if it took the social and ethical values of everyday life into account.

## 2.3 Technocracy

With the modernist scholarly persona, the social commitments of scientists such as Tinbergen, Struik, Burgers, and Van Dantzig were not incidental to their scientific endeavour: Their efforts to create socially relevant science were motivated by their understanding of science itself. They wanted to break away from the impersonal, cold, objective image of science. Therefore, a vision of mathematics as either a purely applied discipline or as a purely abstract discipline were unattractive. The first vision was driven by a fear of science as purely rule-following; the second by that of scientific knowledge as completely devoid of anything resembling everyday experience. In this section, I will show how a group of prominent scholars argued for the adoption of a whole new skill set for those scientists who had previously been associated with politicians, aimed towards making a connection with the life-world (meaning society) once more. Virtues such as leadership, diplomacy, empathy, and a strong moral conviction became part of the scientific self. The resulting style of leadership was conceptualised under to notion of *technocracy*.[61]

In current political discourse, technocracy has assumed an exclusively negative connotation that plays a large part in the misunderstandings of interwar planning in Western Europe. Today technocracy is understood as the rule of experts—a group of elite scientists who can command political decisions. This definition is in fact a later invention and it is important not to confuse technocracy with its contemporary sense if one is to understand early planning debates. As I will argue in this section, technocracy in the interwar years denoted the mixing of scientific and political skills. Although it

61 David Baneke, "Synthetic Technocracy: Dutch Scientific Intellectuals in Science, Society and Culture, 1880-1950," *The British Journal for the History of Science* 44, no. 1 (March 2011): 89–113, https://doi.org/10.1017/S000708741000004X.

took the political leader as its model, its political ambitions were not at odds with modern democracy.

Scientists as politicians did not solely reflect the image of science from the period; they were also informed by the image of the politician itself. Once again, Weber, in his other famous Munich lecture, *Politics as Vocation* (1919), serves as a perfect example. Characteristic of the period is Weber's understanding of politics as revolving around a leader—a lone imaginative individual standing in opposition to the crowd, whether the grey professionals of bureaucracy or the masses of the bourgeoisie and proletariat. Although Weber immediately noted that leadership was not the only legitimising ground in politics, his focus on charisma becomes clear later in the lecture, as Weber argues that the charismatic leader was the only possibility of a political vocation that is not that of the bureaucrat.[62] Weber stated that in modern democratic politics, civil servants and the leaders of political parties had to adhere to neutrality, the avoidance of strife, bound by higher-level commands and strict discipline.[63] Such professions adhered to a form of political legitimation that Weber described as law-making, which was intrinsically part of the rationalisation process described above. Such rationalisation and professionalisation of political roles were imbued by the modern state and party apparatus (what Weber called "the machine"), thus ensuring that the political body was not run by clientelism and partial interests.[64]

However, civil servants and party officials, due to their adherence to procedures and orders, could not completely carry responsibility for their political actions. Rather, they were part of a larger machine that dictated their actions. Moreover, their university educations and bureaucratic skills left them ill-prepared to publicly defend themselves against the litigations normally levelled against bureaucracy. Consequently, they were vulnerable to political opposition forces that sought to undo their power—something that became all the more salient when civil servants found themselves in opposition to parliament. It was for this reason that they rallied behind a political leader—for example, a prime minister—as someone who could unite and speak for the professional class and, crucially, could shoulder all of the responsibility.[65]

---

62 Max Weber, "The Politician's Work," in *Charisma and Disenchantment: The Vocation Lectures*, ed. Paul Reitter and Chad Wellmon, trans. Damion Searls, NYRB Classics (New York: New York Review of Books, 2020), 62–63.

63 Weber, 60–61.

64 Weber, 79.

65 Weber, 77.

However, these leaders were, historically speaking, not professionals, which posed two major problems. As Weber saw in the US political system,[66] leaders were vulnerable to clientelism, as was the case with the ideal type of the leader as the *Boss*. Furthermore, civil servants had substantially more familiarity with political issues, as it was their job. Thus, they were easily able to overrule the decisions of leaders based on their superior knowledge, as was the case in the German system.[67] Therefore, in order for politics to become democratic, the leader had to become a professional. However, Weber thought, this professionalisation itself led to a modern dilemma:

> [F]or the parties to be headed by plebiscitary leaders would mean their followers "losing their soul", or, as one might say, becoming a spiritual proletariat. In order to be usable as an apparatus they must obey blindly, be a machine in the American sense, and not be distracted by the vanity characteristic of notables or by pretensions to hold views of their own. […] There is only the choice between leadership democracy with a "machine", or leaderless democracy. That means: rule by "professional politicians" with no vocation, without the inward, charismatic qualities that go to make the leader. And that in turn means having what the rebel faction within the party usually calls the rule of the "clique".[68]

Charismatic leaders would either partly undo the democratic promise as their decisions would overwrite the decisions, preferences, and ideas of their constituencies—meaning they would rob them of their "soul" (to make a judgement)—or they would not be charismatic, turning to bureaucrats and thus only serve partial interests, for example, the interest of the party elite or "clique", as Weber suggests. Most threatened by this second scenario was a politics based on the common good. With no charismatic leaders, politics would be reduced to mere "horse-trading by notables in order to gain positions, [giving] interest groups the opportunity to enforce the inclusion of their officials on the relevant lists".[69] Weber's fears reflected the analysis by Tönnies—who was, together with Weber, co-founder of the German Society for Sociology—of the transformation from the original wholeness of the community to the fractured and divided, atomised, civil society. Modern society consisted of different classes, professions, and spheres, each with their

---

66 Weber, 87.
67 Weber, 90–91.
68 Weber, 93.
69 Weber, 94.

separate means and ends.[70] The fears of a divided society were closely associated with the fear of rules. As became clear in the previous section, rules were understood as a form of means-end rationality; the same form of rationality upon which civil servants relied for their authority.

The rise of the modern mass political party further complicated these fears. The mass party held the promise and potential to transform millions of disenfranchised citizens into fully participating political subjects, yet it could also inflame the inherent irrational tendencies of "the masses"—a term synonymous with the herd or the horde. Much work from the period, such as Gustave Le Bon's *Psychology of Crowds* (1896), describes the masses as akin to the nervous system of the human body: a highly volatile system, full of fears and anger, and easily over-stimulated.[71] In *Crystallizing Public Opinion* (1923), Edward Bernays described how propaganda could be used to regulate this volatile system, making it more stable.[72] The masses could be controlled through propaganda, like the planners wished to control the economy, but this also meant that rules could yet again rationalise human behaviour, posing a threat to the autonomy and freedom of the individual.

For Weber, the plight of the modern political leader was truly a dilemma: There was no way of escaping it; one had to choose between equally unattractive options. Just as modern science was faced with the dilemma of either living up to the scientific ideal whilst being disconnected from the broader questions of the meaning of life, or providing meaning to life, but losing scientific diligence, so too were politicians faced with a similar dilemma of the soul. Weber's solution in both cases was the internalisation of social morals into the very subjectivity of the scientist and the politician. Scientists had to internalise their ambitions and love for science in order to pursue a career in academia, for they could derive love and drive neither from the cold abstract world of modern physics, nor from the hostile environment of modern academia. Politicians had to internalise a sense of responsibility for the consequences of political actions even when these actions were not their own, but those of the state, civil servants, or the party machine. This included taking responsibility for unforeseen consequences, and for necessary yet

---

70  This idea of social development as an increase of division is a longstanding concern in German thought and goes back to the writings of Kant, see: Michael Sonenscher, "Krausism and Its Legacy," *Global Intellectual History* 5, no. 1 (2019): 20–40, https://doi.org/10.1080/23801883.2019.1586787.

71  Gustav Le Bon, *The Crowd: A Study of the Popular-Mind*, Compass Books C66 (New York: Viking Press, 1960).

72  Edward L. Bernays, *Crystallizing Public Opinion* (New York: Liveright Publishing Corporation, 1923).

immoral actions.[73] This required moral character rather than absolute moral principles.

The ingenuity of Weber's lectures was that they seem to say superficially something different than they do upon deeper scrutiny. On the surface, Weber wanted to make clear delineations between science and politics, but on closer scrutiny, the similarities become all the more visible. Weber denounced the Greek ideal of the cultivation of character and the good life as superseded by rationalisation, yet he relied on a very Aristotelian notion of character and personal virtue in order to find answers in modern times.[74]

It is therefore unsurprising that many scientists ultimately did not adhere to Weber's distinction between science and politics, but sought instead to incorporate political virtues into their scholarly personas. Contrary to Weber, who thought that scientists would make awful politicians, Dutch scholars such as Philip Kohnstamm, the engineer Isaäc Pieter de Vooys, and the biologist Hermann Jacques Jordan celebrated examples such as the German industrialist Walther Rathenau, the US President Woodrow Wilson, and the Russian diplomat Leonid Krassin as men of science who had chosen a career in politics later in life.[75] Adopting the American notion, Dutch scholars referred to this mixing of political and scientific virtue in the pursuit of leadership as technocracy, which gained a definition somewhat distinct from its American counterpart.[76]

In 1917, for example, the engineer De Vooys argued for the "richer imagination" of engineers, allowing them to think beyond the confined boundaries of their technical problems. This would allow for "creative thinking under scientific control".[77] De Vooys was making a plea for a broader social orientation for engineering students, but also for the utilisation of technical means for political ends. De Vooys believed that creative engineers were able to utilise their technical skills to enhance their political leadership qualities. Good political leaders were like managers: They had a good overview over the political process, so they could direct where necessary. Technological tools, such as statistics and measuring instruments, could be used to create

---

73  Weber, "The Politician's Work," 104.

74  Duncan Kelly, *The State of the Political: Conceptions of Politics and the State in the Thought of Max Weber, Carl Schmitt, and Franz Neumann*, The State of the Political (Oxford: Oxford University Press, 2012), 23–26.

75  Baneke, *Synthetisch denken*, 110.

76  Baneke, 101; Luwel, *Technocratie*, 101.

77  Isaäc Pieter de Vooys, "De economische taak van den ingenieur na den oorlog,'" *De Ingenieur* 32 (1917): 598–611; cited in: Baneke, *Synthetisch Denken*, 108–109.

this overview. However, humanistic skill was also indispensable. If engineers wanted to be creative, they needed a poetic understanding of reality. The scientific model was like poetics; it was a creative force, producing new images that could alter society. To that end, a training in the humanities was crucial.[78]

De Vooys' writings provide an exemplary case of technocratic thinking in which political and scientific skill were mixed.[79] Like Weber, his emphasis was on the inner life of the engineer, as a new scientific worldview was necessary that could foster the necessary virtue of creativity and the ability to take a broad overview. Unlike Weber, De Vooys saw this scientific worldview as the start of a new community spirit in which machines and human culture were no longer thought of as opposites. The scientist-politician could become the ultimate leader of such a renewed community.

Whilst amongst engineers, De Vooys was perhaps the most outspoken, he was by no means unique. Around the same period, the student association of the engineering students of the Delft technical college considered the social role of the engineer crucial as a mediator between the class conflicts of employers and workers. The students saw the technocratic leader less as the ultimate decision maker, and rather more as someone who could stand above the warring parties and find a common ground. The virtues they emphasised were more of the diplomatic kind: A good engineer had to know the needs of the workers and understand their worldview. Technical models could be used to reveal those needs and to improve upon the workers' understanding of their own situation. The SDAP member and engineer Jan Goudriaan spoke of "chivalry"—a combination of "feeling and emotion" and "the hard as steel perseverance" of scientific intellect that needed to characterise the attitude of the engineer.[80] As I will show in the fifth section, it was in this engineering milieu that Tinbergen was socialised. His ideas on planning very much reflect the technocratic ideals of this period.

These engineers provide examples of how scholars in the interwar years gave shape to their personas in a technocratic manner. More than Weber, they emphasised that technology and science could be used to cultivate the

---

78 Baneke, *Synthetisch Denken*, 106–107.

79 Henk Muntjewerff, "Tussen Kapitaal en Arbeid, momenten uit het openbare leven van de dichter-ingenieur, Isaäc Pieter de Vooys," Jaarboek De Oranjeboom 50, 1997, 174–218.

80 VSS, *Algemene Vergadering 30-10-1937*, 136; cited in: Boumans, "De contstructie van de samenleving," 230; See also: Martin Fase, "Van eigenzinnig ingenieur naar sociaal econoom: Jan Goudriaan jr. (1893-1974)," *TPEdigitaal* 8 (3) (2014): 114–27.

corresponding virtues and to utilise them in their social commitments. Precisely what those virtues entailed lay at the heart of the discussion, not least as "technocratic" was also a nebulous term, which each engineer interpreted in their own fashion. Some emphasised creativity and responsibility, as Weber had done, whilst others spoke more of diplomacy and empathy. In most cases, the independence of the scholar remained central. The scholar had, or needed, an outsider's perspective on pressing political matters such as the "social question" (i.e., the impoverished situation of the working class). This provided the scholar with the perfect position from which to act as a leader. Even party ideologues, such as Willem Bonger of the SDAP, fashioned themselves as independent thinkers equally independent of the party leadership. Especially with the rise of fascism, Bonger stressed the importance of free-thinking, independent intellectuals.[81]

## 2.4 Neurath: Between Ethical Life and Welfare

In 1909, Tönnies wrote to Neurath, apologising for his slow response to Neurath's last letter. He explained that the delay was due to the unexpected death of his brother and its aftermath, in which he and his wife needed to care for the grieving family. These sad circumstances prompted Neurath to write a long reply to Tönnies who, following the death of his own father, he considered as something of a second father.[82] In the letter, Neurath reflects on the nature of life and death, ethical questions, and their relation to scientific work: "[M]odern development mainly suffers from the fact that it still uses the traditional psychology from the times when ethics was systemised for the first time; hence some crucial phenomena were eliminated in the name of rationality", he wrote.[83] Neurath referenced the works of Christian Grave and Immanuel Kant, whose rigid ethical rules he deemed wholly inappropriate to address human emotions such as grief. Rationalism, there-

---

81 Bart van Heerikhuizen, "W.A. Bonger, 1876-1940," *Facta* 4, no. 2 (March 1996): 22–25.

82 "My father had many personal qualities in common with you though he was less inclined to be embittered. And I believe that I told you already in Salzburg that since my father's death nobody had spoken to me as you did." Letter from Neurath to Tönnies, 26 February 1906, Neurath Nachlass, Noord-Hollands Archief, Haarlem Wiener Kreis Archief, inventory number: 312. Expressions of such fatherly feelings can be found throughout the correspondence between Neurath and Tönnies.

83 Undated letter from 1909, Neurath Nachlass, Noord-Hollands Archief, Haarlem, Wiener Kreis Archief, inventory number: 312, my translation.

fore, missed what ethics was really about, namely: "custom and simple life".[84] Continuing, Neurath stated that "the order of the whole life is an ethical problem", but added with disappointment: "[T]he only scholars that take this lesson to heart are the fools who are obsessed with culture, or something similar."[85] Consequently, Neurath argued:

> [T]he great questions of our time, [such as] the organisation of our economy [and] politics, are no longer recognised as ethical questions. One treats these issues as if they were givens so to speak and treat them in a narrow manner.[86]

In this letter, Neurath foreshadows much of what would become one of the major research topics of his later career, especially after starting work on the concept of the war economy in 1912.[87] Neurath greatest legacy, at least in the English-speaking world, is his pioneering role in the logical positivism movement and his editorship of the *International Encyclopedia of Unified Science*. Secondary literature from the last two decades has unearthed another side of Neurath's writings which, in the focus on logical positivism in its US interpretation, had been largely forgotten, namely, his political and economic thinking.[88] This section builds on these recent discoveries and attempts to interpret Neurath's writings on economics as an expression of the interwar scholarly persona of the socially-committed scientist. First, I briefly summarise Neurath's economic thought. Second, I interpret his reference to the notion of community in relation to Tönnies' use of the same term. Finally, I investigate how his social commitments concretely took shape. As I will show, Neurath's thinking on economics raises the issue of the role of the

---

84 Ibid.

85 Ibid.

86 Ibid.

87 Nader Vossoughian, *Otto Neurath: The Language of the Global Polis* (Rotterdam: NAi Publishers, 2008), 28.

88 In particular: Cartwright, Nancy, Jordi Cat, and Thomas Uebel, *Otto Neurath: Philosophy between Science and Politics* (Cambridge, UK: Cambridge University Press, 1996); Thomas Uebel, "Introduction: Neurath's Economics in Critical Context," in *Otto Neurath: Economic Writings, Selections 1904-1945*, ed. Thomas Uebel and Robert S. Cohen, Vienna Circle Collection (Dordrecht: Kluwer, 2004), 1–108; Elisabeth Nemeth and Richard Heinrich, *Otto Neurath: Rationalität, Planung, Vielfalt* (Köln: Böhlau Verlag, 1999); Elisabeth Nemeth, Stefan W. Schmitz, and Thomas E. Uebel, eds., *Otto Neurath's Economics in Context*, Vienna Circle Institute Yearbook (New York: Springer-Verlag, 2007), https://doi.org/10.1007/978-1-4020-6905-5; Vossoughian, *Otto Neurath*.

state in planning, something towards which he assumed a somewhat ambiguous stance.

Following Adam Smith, Neurath took the main object of economics to be wealth. However, contemporary economics, in Neurath's eyes, had taken a very narrow view of wealth, expressing it solely in terms of utility (later framed in terms of "satisfaction of preferences") and money. In other words, economic theory was more concerned with prices and monetary value than with the well-being of the individual. In this manner, Neurath revolted against the crude manner in which neoclassical economists such as Alfred Marshall, Léon Walras, and Stanley Jevons had tried to measure utility as a psychological state.[89] In this sense, he was closer to his fellow Viennese economists of the Austrian School, who similarly rejected the measurability of utility. However, according to Neurath, the Austrian School was still stuck with a fetish for monetary value, with its assertion that prices were the only reliable, measurable data in economics.[90] Neurath believed that the true object of economics was a broad notion of welfare, which he called the "orders of life" (*lebenslage*), also translated as "standards of living".[91] These were not prefixed standards, but rather concerned the manner in which people were able to give shape to their own lives. The proper object of economics was thus the impact of economic processes on the way people shape their lives or are unable to do so.[92] As becomes clear from the above-cited letter Neurath sent to Tönnies, giving shape to one's life was an ethical matter involving "customs and simple life".[93]

Building a theory on the orders of life, Neurath was influenced by Tönnies' work *Community and Society* (1877). He first read the book as a young student when attending a summer school in Salzburg on sociology and history in 1903 where, as well as other luminaires of the historical school of eco-

---

89 Uebel, "Introduction," 34–39.

90 Thomas Uebel, "Incommensurability, Ecology, and Planning: Neurath in the Socialist Calculation Debate, 1919–1928," *History of Political Economy* 37, no. 2 (2005): 309–42, https://doi.org/10.1215/00182702-37-2-309.

91 As, for example, is the case in the collected volume: Otto Neurath, *Economic Writings: Selections 1904–1945*, ed. Th E. Uebel and Robert S. Cohen, Vienna Circle Collection 23 (Dordrecht: Springer, 2004).

92 Otto Neurath, "Economic Plan and Calculation in Kind," in *Otto Neurath Economic Writings Selections 1904–1945*, ed. Robert S. Cohen and Thomas Uebel, Vienna Circle Collection 23 (Dordrecht: Springer, 2004), 418–23.

93 The expression returns (albeit phrased a little differently) in an article from 1917, see: Otto Neurath, "The Conceptual Structure of Economic Theory and Its Foundations," in *Otto Neurath Economic Writings Selections 1904–1945*, ed. Robert S. Cohen and Thomas Uebel, Vienna Circle Collection 23 (Dordrecht: Springer, 2004), 318.

nomics, such as Werner Sombart, he met Tönnies for the first time. When he started working on his orders of life theory in 1922, he wrote to Tönnies: "I am working at a larger book about socialist living order, in which I deal with socialism as aim and as historical result systematically. This, of course, made me look into [your book] *Community and Civil Society* again."[94] Although he was never too explicit about it, Nader Vossoughian has argued that Neurath kept relying on the notion of community as outlined by Tönnies throughout his career.[95] Making community into an ideal for a socialist form of co-existence, whilst also being a proponent of the planning, globalisation, and mass media associated with modern society, Neurath was typically adhering to the dualism of modernism as analysed in the second section of this chapter.

Tönnies had described community (*Gemeinschaft*) as a form of human cohabitation in which the personal, family, moral, and religious bonds between people assumed a central role and formed an organic whole. Fundamental to the bonds of the community was an *expression of will*. This particular will, which Tönnies called the "essential will" (*Wesenswille*), was the expression of one's whole character or personality, and therefore primarily reflected personal morals and value commitments.[96] Civil society (*Gesellschaft*), in contrast, was defined by Tönnies as the more formal, contractual, rational, and law-bound relationships humans had formed in modern times. These types of relationships were the expression of a different will: the "arbitrary will" (*Kürzwille*). This type of will consisted primarily of the application of rational faculties, utility, and comparisons between means-end relationships.[97] To simplify, these relationships, formed in large areas of co-habituation such as cities, were not founded on the organic whole of personal value commitments, but rather on the rational consideration of whether these relationships could be beneficial to the individual or society as a whole.

Neurath partly modelled his idea of an ethical basis for economics on Tönnies' notion of community, as he saw the personal moral bonds people formed in small communities as typical expressions of the "customs and simple lives" economic research should investigate. This was reflected in his critique of modern economics as only interested in the customs of people in

---

94 Letter from Neurath to Tönnies, January 29, 1922, Neurath Nachlass, Noord-Hollands Archief, Haarlem Wiener Kreis Archief, inventory number: 312, my translation.

95 Vossoughian, *Otto Neurath*, chap. 1.

96 Tönnies, *Community and Civil Society*, 108–14.

97 Tönnies, 116–17.

so far they were engaged in market relations of buyer and seller—in other words, the means-end rationality of the market that was typical of the arbitrary will. Neurath's new ethical research object was therefore not solely a matter of scientific investigation, but also a political aim. As he wrote in *Economic Plan and Calculation in Kind* (1925), the theory of economic planning was intended to remove the arbitrary will of the market and give workers the freedom to give shape of their "orders of life" in accordance with their personal moral convictions—that which Tönnies might call the expression of their essential will.[98]

The connection between personal morals and economic planning is given a precise treatment in Neurath's booklet *Personal Life and Class Struggle* (1928). The aim of the booklet was the investigation of the emergence of a global workers' community that could be counter-posed to bourgeoise society. The conditions of capitalism fostered, in Neurath's view, the moral conviction—or, as he would call it, *the pattern of personal life*—on which a community could be formed. For example, the solidarity of a workers' strike anticipated the solidarity of the workers' community.[99] Bourgeoise morality was bound so closely to national institutions such as the army, the colonies, and educational and cultural values that animosity between nations and the possibility of war always loomed large, even amongst those bourgeoise intellectuals who preached pacifism. In contrast, workers' patterns of life, which could be found in "party organizations, in the proletarian youth movement, but also where proletarian majorities on local councils further the living conditions of the broad masses in a planned manner."[100] There organisation functioned outside of nationalist institutes and were therefore capable of being truly international. In this manner, Neurath embraced the ethical ideas of Tönnies' notion of community, but did not adhere to its local character, thus transforming it into a project of modernity. Moreover, in doing so, Neurath expressed the "orders of life" in relation to a historical development or, as he told Tönnies six years earlier, "socialism as aim and as historical result".[101] The socialist pattern of personal life was a promise for the future, yet at the same time it was already concretely formed in the past. It provided

---

98  Neurath, "Economic Plan and Calculation in Kind."

99  Otto Neurath, "Personal Life and Class Struggle," in *Empiricism and Sociology*, ed. Marie Neurath and Robert S. Cohen (Dordrecht: D. Reidel Pusblising Company, 1973), 253.

100  Neurath, 259.

101  Letter from Neurath to Tönnies, January 29, 1922, Neurath Nachlass, Noord-Hollands Archief, Haarlem Wiener Kreis Archief, inventory number: 312.

socialism with a historical sense different from that of Marx.

Neurath's emphasis on parties, youth movements, and councils indicates that the state was not the main vehicle for his planning theories. His stance towards the state can best be described as agnostic. In 1919, Neurath was involved in the short-lived Bavarian Soviet Republic, for which he designed a number of planning programmes. In these programmes, he considered the state the most natural central organisation to direct the planning efforts of the new republic. "Economic plans are realized exclusively by large organizations, the most significant of which today is the state", he wrote.[102] However, the focus was not exclusively on the state, as the social engineer (the planner) was also to pay attention to "the creation of new intermediate links" in the socialised economy, such as "co-operatives, cartels, banks, mixed firms, trade unions, consumers' associations, chambers of commerce, [and] chambers of agriculture".[103] Almost ten years later, in *Personal Life and Class Struggle* (1928), Neurath struck a different tone: "For a socialist whose thinking is consistent, world socialism is statelessness", he proclaimed.[104] The notion of the state was an obstacle to the fostering of a world community and relied on the substrate of the nation and national culture for its supposed unity, thus making states prone to starting wars.

Also, on epistemological grounds, Neurath was sceptical of the state. In his *Empirical Sociology* (1931), which attempted to provide a groundwork for all the social sciences, Neurath argued that the state was not an empirical entity, as one could not observe "the state":

> One can make no mistake if one speaks everywhere of precisely specifiable spatio-temporal objects (thus, on the one hand, of the state as an aggregate of men, streets, houses, prisons, rifles, factories, etc., and, on the other, of works of art, buildings, pictures, sculptures, religious books or speeches, scientific books or lectures, facial expressions, gestures, behavior in love, etc.).[105]

The state did not fit Neurath's physicalist philosophy of science, in which all

---

102 Otto Neurath, "Character and Course of Socialization," in *Empiricism and Sociology*, ed. Marie Neurath and Robert S. Cohen (Dordrecht: D. Reidel Pusblising Company, 1973), 137.

103 Neurath, 138.

104 Neurath, "Personal Life and Class Struggle," 271.

105 Otto Neurath, "Empirical Sociology: The Scientific Content of History and Political Economy," in *Empiricism and Sociology*, ed. Marie Neurath and Robert S. Cohen (Dordrecht: D. Reidel Pusblising Company, 1973), 353.

scientific statements had potentially been reduced to spatial-temporal ob-
servation statements. Neurath was not alone in his state scepticism. A young
generation of sociologists sought to dismantle the German idea of the state
as a person, as Eugen Ehrlich did for the Austrian-Hungarian context and
Harold Laski in the United Kingdom.[106] However, Neurath's scepticism did
not mean that social democratic politics should not be focussed on the state
level, as they could be potential vehicles for planning operations: "[F]or the
time being the organized proletariat must reckon with the existing state en-
tities, in fact it even takes over many of their traditional sentiments and no-
tions."[107]

What did "the creation of new intermediate links" and fostering of a
world community by social engineers mean in concrete terms? The scientist
was, by definition, not part of the working class, but still had an important
role to play in the fostering of international solidarity and the ability of the
worker to give shape to his personal pattern of life. Neurath conceived the
task of the scientist for society as that of the educator. Neurath was aware
that this persona for the scientific expert was a somewhat thorny issue, espe-
cially since the role of the educator in German society was strongly associat-
ed with the *Bildungsbürgertum*—a social class that used education to create a
closed circle of elite civil servants (as explained in section 2.1), and precisely
the "cultured" class Neurath opposed throughout his career.[108]

The problem of *Bildung* was its exclusive focus on higher and classical
culture, using it as a stand-in for national culture as an organicist whole. As
noted above, Neurath was averse to institutes that propagated nationalist
sentiments. Moreover, he disputed the idea that the lower classes professed a
lesser type of culture, or were without culture at all. Therefore, education for
the working class had to be public and non-hierarchical. Receiving educa-
tion should not result in becoming a member of a new class. Instead, the goal
of education was the fostering and cultivation of one's own class.[109] Neurath

---

106 Franz Leander Fillafer, "Imperial Diversity, Fractured Sovereignty, and Legal
Universals: Hans Kelsen and Eugen Ehrlich in Their Habsburg Context," *Modern
Intellectual History* First view (February 1, 2021): 15; David Runciman, *Pluralism
and the Personality of the State* (Cambridge, UK: Cambridge University Press, 1997),
chap. 9.

107 Neurath, "Personal Life and Class Struggle," 272.

108 Günther Sandner, "Demokratisierung des Wissens: Otto Neuraths politisches
Projekt," *Österreichische Zeitschrift für Politikwissenschaft* 38, no. 2 (2009): 231–48,
https://doi.org/10.15203/ozp.673.vol38iss2.

109 Günther Sandner, "Economy, Ideology and Culture: Otto Neurath's Approach
to a Precarious Relationship," in *Otto Neurath's Economics in Context*, ed. Elisabeth
Nemeth, Stefan W. Schmitz, and Thomas Uebel, Vienna Circle Institute Yearbook 13

believed that if workers would gain more knowledge of their own situation, this would foster the feeling of belonging to an international community of workers. It would cultivate the pattern of personal life, making workers conscious of being part of a historical development. Such a consciousness would empower political action, both against the ruling class, and to shape the community as the workers saw fit.

After his brief participation in the Bavarian Soviet Republic in 1919, Neurath was banished from Germany, returning to his native Vienna, which was by then governed by the social democrats. In 1923, Neurath had the chance to put his developing ideas on science education for the workers into practice when he became the director of the Museum of Society and Economy in Vienna.[110] As museum director, Neurath started working on his Vienna Method of Visual Statistics, later renamed ISOTYPE. It was a method to present statistical facts in a manner that was accessible for everyone, even those with no education or no prior experience in statistics.[111] Instead of using numbers, in collaboration with, amongst others, Marie Reidemeister and Gerd Arntz, Neurath designed standardised symbols to express the magnitude of statistical phenomena (see figure 2.1). The system was a precursor to what is now known as infographics.[112] ISOTYPE was an example of how science could not only be attentive to the ethical life of individuals, but could also serve as a means to emancipate workers, giving them the agency to shape their personal customs. Furthermore, ISOTYPE was a method to transform the abstract, rule-bound knowledge of statistics into something that related directly to the subjective experience of workers.

With the use of ISOTYPE, planning gained its most concrete form in Neurath's writings. Visual statistics could be used, not only for the formation of workers' communities, but also to communicate economic figures in a clear and concise manner. Keeping track of materials, rather than money and prices, was crucial if the free market was to be transformed into a planned

(Dordrecht: Springer, 2007), 141–55.

110 Loïc Charles and Yann Giraud, "Seeking the 'Museum of the Future': Public Exhibitions of Science, Industry, and the Social, 1910–1940," *History of Science* 59, no. 2 (2021): 133–54.

111 Otto Neurath, "Visual Education: Humanisation versus Popularisation," in *Encyclopedia and Utopia: The Life and Work of Otto Neurath (1882—1945)*, ed. Juha Manninen, Elisabeth Nemeth, and Friedrich Stadler, Vienna Circle Institute Yearbook, Vol. 4 (Dordrecht: Kluwer, 1996), 245–335.

112 Elisabeth Nemeth, "Visualizing Relations in Society and Economics: Otto Neurath's Isotype-Method Against the Background of His Economic Thought," in *Neurath Reconsidered*, ed. Jordi Cat and Adam Tamas Tuboly, Boston Studies in the Philosophy and History of Science, no. 336 (Cham: Springer, 2019).
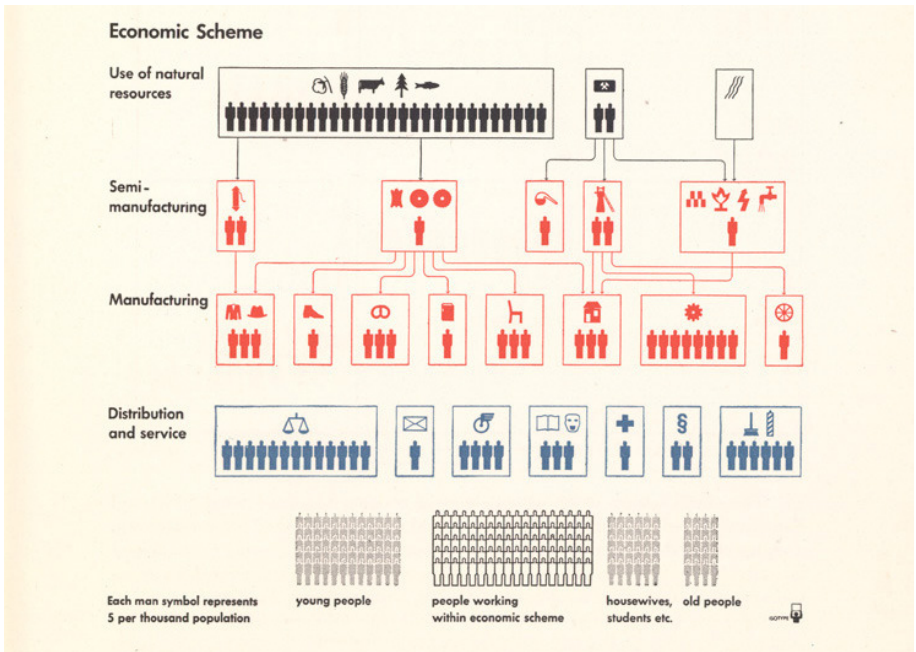
**Figure 2.1 "Economic Scheme", from Otto Neurath, *Modern Man in the Making* (New York: Alfred A. Knopf, 1939)**

This scheme functions as a tableau economique, providing an overview of the inter-relationships in a single economy in a manner easy to understand by the layperson.

economy. In a much discussed debate, Neurath's emphasis on information led critics of planning such as Friedrich Hayek and Ludwig von Mises to attack Neurath's optimism towards the creation of objective economic information.[113] Comments on this debate often miss how Neurath's dismissal of monetary value is related to his emphasis on the personal value patterns of worker communities.[114] Neurath's theory of visual statistics brought together the two faces of planning: an organisational theory of how to distribute goods within a society; and a theory of how workers could shape their economy. The state, as an entity that could organise the distribution of goods, was not theorised as such. Rather, its focus was the worldwide cooperation between workers.

## 2.5 Tinbergen: Between Religious and Engineering Socialism

Compared to Neurath's ambitious and colourful writings, Tinbergen's style of plan economics seems at first glance the complete opposite. Tinbergen formulated his ideas in a very technical language, full of abstract models and large statistical tables. Engaging in the political debates of the time, he always adopted a careful and nuanced tone, emphasising the positive aspects of the arguments of his liberal opponents. His scholarly persona seems to be that of a technical, distanced natural scientist able to apply an objective analysis of economic-political issues, rather than that of the spirited socially-committed scientist who sought to bridge the abstract and rigid world of science with the life-world. Perhaps this formed the basis for the misconception of Tinbergen as the arch technocrat.

Upon closer scrutiny, however, it becomes clear that ethical convictions formed the core of Tinbergen's scientific investigations. Although I am far from the first to note Tinbergen's ethical convictions, less attention has been paid to how he integrated these convictions with the scholarly persona of the socially-committed scientist.[115] To understand this integration, I will situate

---

113 Friedrich Hayek, ed., *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism* (London: George Routledge & Sons, 1935).

114 This point is made more elaborate in: Uebel, "Incommensurability, Ecology, and Planning."

115 Boumans, "De contstructie van de samenleving"; Alberts, "Socialism and Mathematics"; Adrienne van den Bogaard, "Economie als wiskundige abstractie of als uitdrukking van zingeving? Strijdende visies bij het ontstaan van het centraal planbureau," *Gewina: Tijdschrift voor de Geschiedenis der Geneeskunde, Natuurwetenschappen, Wiskunde en Techniek* 24 (2001): 225–41; Erwin Dekker, "The Socialist

Tinbergen's work within two branches of social democracy in the SDAP of the time: engineering socialism and religious socialism. Afterwards, I will show how his scholarly persona played a role in the development of the Labour Plan of 1935.

Tinbergen wrote many of his early interventions in the socialist debates of the interwar period in the periodical *The Socialist Guide* (*De Socialistische Gids*), the scientific journal of the SDAP. *The Socialist Guide* was partly the brainchild of the previously mentioned sociologist Willem Bonger, who, in order to push for more scientific inspired ideas within the party, had pleaded for a scientific journal within the SDAP. Like Friedrich Engels and Karl Kautsky, Bonger saw Marxist socialism as a scientific theory. However, different from "orthodox" Marxists of the period, Bonger saw socialist science, not as an objective description of the development of history, but rather as a force pushing history forwards.[116] In other words, science and socialism were both forces of modernism. His views are therefore a typical expression of the scholarly persona in which scientists became agents of modernity, and the experience of time an unstoppable modernism, as described in the opening sections. Consequently, for Bonger it was of the utmost importance to adopt new scientific ideas for the socialist cause. He did so himself by introducing new insights from criminology and eugenics into the SDAP. Furthermore, he enlisted help from engineers such as Jan Goudriaans and Theo van der Waerden to write for *The Socialist Guide* on economic matters. Goudriaans and Van der Waerden framed socialist issues in technical terms of rationalisation and efficiency, in which increased rationalisation in economic terms would yield more productivity and the possibility for workers to share in the extra wealth generated. That such a vision contained the possible danger of worker alienation through an increase in the division of labour went largely undiscussed.[117]

However, Bonger's style irritated some amongst the SDAP membership. When the then party leader, Jelles Troelstra, in response to the upheaval and insurrection in Germany, declared the start of the Dutch workers' revolution in 1917, Bonger strongly denounced his actions. Bonger considered it a fool-

Origins of Expert Institutions to Govern the Economy: Jan Tinbergen and the Rise of Economic Expertise" (Paper presented at the Building the neoliberal welfare state Workshop, University of Amsterdam, 28 June 2019).

116 Annemarie Rullens, "From Science to Science: Anton Pannekoek, Willem Bonger, and Scientific Socialism," in *Anton Pannekoek: Ways of Viewing Science and Society*, ed. Chaokang Tai, Bart Van der Steen, and Jeroen Van Dongen (Amsterdam: Amsterdam University Press, 2019), 160–63.

117 Rodenburg, "Rationalization and the 'Engineer-Economists,'" 45–47.

ish act, aroused by emotions rather than careful analysis of the situation. In Bonger's mind, a good socialist leader had to be cool-headed, base his judgement on science, and steer away from emotions.[118] It was a clear example of the technocratic ideal in which the political leader had to mix the Taylorian manager of the factory floor with political vision. However, this sentiment was not widely shared and in 1927, fellow sociologist and party member Rudolf Kuyper argued instead that strong emotion was precisely what the SDAP needed if it wanted to realise its socialist goals. A new spirit of socialism and a strong sensibility for the injustice in the world would mobilise workers and intellectuals alike for the socialist cause. He saw a model for the emergence of such a new spiritual awakening in the youth movement of the party, the Workers' Youth Confederation (*Arbeiders Jeugd Centrale*, AJC).[119]

Kuyper's reference to the AJC is significant as it acknowledges the other large current in the SDAP of the time, namely, religious socialism. In the 1920s, under the leadership of the school teacher Koos Vorrink, the AJC had embraced the ideal of religious socialism, especially those later termed *personalism* and promoted by the pastor and theologian Willem Banning.[120] The goal of the AJC youth camp had, under Vorrink's guidance, become the cultivation of the character of young socialists. This took the form of adherence to a strict moral code of modesty, abstinence, simplicity, and physical exercise, whilst dance, theatre, and sports were encouraged as cultivations of the creative faculties.[121] Banning and Vorrink were especially inspired by the work of Hendrik de Man, the Belgian leader of the social democrats, who had, in his *The Psychology of Socialism* (1927), placed ethical and religious consideration central to socialist politics.[122]

*The Psychology of Socialism* had taken issue with the older generation of Marxist theorists who had, in the eyes of De Man, turned the ideas of Marx into a dogmatic system full of "determinism, causal mechanism, historicism,

---

118 Rullens, "From Science to Science," 165.

119 Rudolf Kuyper, "Het socialisme, de hoofdarbeiders en de komende cultuur," *De Socialistische Gids* 11, no. 3 (1926): 344–68.

120 Arie L. Molendijk, "Willem Banning and the Reform of Socialism in the Netherlands," *Contemporary European History* 29, no. 2 (May 2020): 139–54, https://doi.org/10.1017/S096077732000003X.

121 Leo Hartveld, *De Arbeiders Jeugd Centrale AJC: 1918–1940, 1945–1959*, De Nederlandse arbeidersbeweging 11 (Amsterdam: Van Gennep, 1982).

122 Tommaso Milani, "«Les Belles Années Du Plan»? Hendrik de Man and the Reinvention of Western European Socialism, 1914–36 Ca." PhD Thesis (London School of Economics, 2017), 145.

rationalism, and economic hedonism",[123] whilst paying no attention to the psychological state of individual workers. For De Man, the core of socialism resolved around the joy the worker could find in his or her labour. The ills of capitalism were those that alienated the workers from their own product, ridding them of the dignity of work. The visions of the fully rationalised factory provided the nightmarish vision that motivated his argument. Socialist politics should thus first and foremost focus on giving the workers back the autonomy to shape their working conditions as they see fit. For De Man, this did not require the collectivisation of the means of productions *per se*, as this autonomy could also be achieved within the capitalist system. Similarly, and vice versa, a collectivised system that did nothing for the autonomy of workers could not be called properly socialist.

Just like Neurath, De Man asserted that working-class solidarity formed an important precondition for restoring the workers' joy in labour. However, in contrast to Neurath, who saw solidarity as a completely new sentiment under capitalist conditions, De Man considered solidarity to stem from the "ancestral community instincts which had been modelled into ethical norms by Christianity and by the social experience of past centuries".[124] De Man thus sought a "renovation of socialist conviction by means of the moral and religious consciousness".[125] Broadening the intellectual basis of socialism, not only including the works of Marx, but also appealing to Christian and progressive liberal ideals, De Man hoped to make socialism more attractive to a larger group of intellectuals, whose engagement was necessary if true political reform was to occur. These ideals were copied by Vorrink and Banning, who sought not only to build socialist politics on ethical ideals—the autonomy and cultivation of personhood—but also to broaden the base of the SDAP, transforming the party from a workers' into a people's party.[126]

One of the participants in the AJC's youth camps was the young Tinbergen. Coming from a family of Remonstrants—a small denomination of more liberal-oriented Protestants—the Protestant ideals of Banning and Vorrink were not alien to him and he would carry the strict moralism of the

---

123  Hendrik de Man, *The Psychology of Socialism* (London: George Allen & Unwin, 1928), 14; cited in: Milani, "Les Belles Ánnées Du Plan," 101.

124  De Man, *The Psychology of Socialism*, 64; cited in: Milani, "Les Belles Années Du Plan," 101.

125  De Man, *The Psychology of Socialism*, 397; cited in: Milani, "Les Belles Années Du Plan," 105.

126  Bernard Rulof, "Hoe het Plan van de Arbeid te Verkopen? Reclame en 'massa-psychologische actie' van de SDAP," *TSEG - The Low Countries Journal of Social and Economic History* 2, no. 1 (2005): 87, https://doi.org/10.18352/tseg.715.

AJC with him for the rest of his life.[127] As a result, in his very first publications, Tinbergen already sought to bring together the ideals of the engineering and religious socialists.

In 1928, for his first publication for *The Socialist Guide*, Tinbergen took an engineering socialist perspective, combining Marxist economics with the exchange theory of value of neoclassical economists, who took marginal utility as their starting point. Using an Edgeworth Box model,[128] Tinbergen argued that markets would yield multiple Pareto optimal solutions, some of which were more in the interest of workers than others. However, capitalist-liberal theory could not live up to its promise that these optimums were reached through the exchange actions of rational actors alone. The market was either too slow in reacting to changes in supply and demand, or would not move at all due to the interests of factory owners and the bourgeoisie. Instead, Tinbergen promoted a "regulator" that could force disequilibrium to yield, thus allowing a new optimum between supply and demand to form. The use of such a regulator to move the market and to ensure prices and production kept pace, was what Tinbergen understood as planning.[129] This vision of planning was in line with that of the engineering socialists. Like them, Tinbergen embraced market forces and rationalisation as forces of modernity that would eventually yield beneficial results for the workers. Moreover, Tinbergen thought that the market regulator should be dictated by a sector-specific workers' council that could decide when and how markets should be forced to move.[130] It was thus the planner's task to keep the sluggish capitalist system moving, resulting in an increase in efficiency and creating more wealth for everyone.

A year later, in a more technical article, *Mathematic Psychology* (1930), Tinbergen revealed his more religious socialist inclinations. Using again an Edgeworth Box model to calculate the utilities of workers with the rise of wages, Tinbergen lamented the lack of psychological consideration in the making of economic policies and wage negotiations, showing that a rise in wages would not automatically yield an increase in the utility workers could

---

127 Jan Pen, "Met Jan Tinbergen - I," *Hollands Maandblad* 43, no. 1 (2005): 686–97.

128 For an analysis and history of this model, see: Mary S. Morgan, *The World in the Model: How Economists Work and Think* (Cambridge, UK: Cambridge University Press, 2012), chap. 3.

129 Jan Tinbergen, "Opmerkingen over ruiltheorie I," *De Socialistische Gids* 13, no. 5 (May 1928): 443.

130 Tinbergen, 445.

gain from purchasing new goods.[131] The well-being of the worker consisted of more than high wages alone. Unlike Neurath, who disposed of measuring utility completely, Tinbergen based his argument on the work of British welfare economists such as Henry Sidgwick who, like the religious socialists, had emphasised ethical principles as lying at the core of what a welfare economy should be.[132]

A combination of engineering and religious socialist ideals can be found in a series of articles on unemployment from 1931 and 1932 in *The Socialist Guide*. Most of these pages were devoted to Tinbergen's main scientific preoccupation, namely, the so-called "business cycle".[133] However, the statistical methods he was pioneering at the time did not distract Tinbergen from the psychological harm of unemployment. Working for the Dutch Central Bureau of Statistics at the time, Tinbergen stated, somewhat surprisingly: "It is remarkable that these data are indeed sufficient for the assessment of the economic side of the unemployment problem, but are absolutely inadequate for the assessment of the psychological side of it."[134] Tinbergen especially attacked the lack of consideration for personal life in the short-term measures that were proposed to counter the unemployment crisis. Long-term unemployment was to the detriment of the mental well-being of the worker, for example, causing them to lose the willingness to work overtime. Temporary unemployment was less negative, but here the uncertainty of constantly finding a new job could also bear on the psychological condition of the worker. Economic measures would have to take these elements into consideration, favouring larger lay-offs if labourers could quickly find new work over the long-term unemployment of a smaller group.

---

131 Jan Tinbergen, "Mathematiese Psychologie," *Mens en Maatschappij* 6, no. 4 (1930): 342–52.

132 Roger E. Backhouse and Tamotsu Nishizawa, "Introduction: Towards a Reinterpretation of the History of Welfare Economics," in *No Wealth but Life: Welfare Economics and the Welfare State in Britain, 1880–1945* (Cambridge, UK: Cambridge University Press, 2010), 1–22.

133 "The business cycle" (*Economische Conjunctuur* in Dutch) was a relative new concept of the time—only emerging in the 1920s—describing the now well-known phenomenon of sequential up- and down-turns of the economy. Tinbergen had a pioneering role in the statistical underpinnings for the description of these up- and down swings. For Tinbergen's work on business cycles from the period, see: Adrienne van den Bogaard, "Past Measurment and Fututre Prediction," in *Models as Mediators, Perspectives on Natural and Social Science* (Cambridge, UK: Cambridge University Press, 1999); Harro Maas, *Economic Methodology: A Historical Introduction* (London: Routledge, 2014), chap. 4.

134 Jan Tinbergen, "De Werkloosheid," *De Socialistische Gids* 15, no. 12 (December 1930): 819.

After the economic crash of 1927 and the ensuing economic crisis and mass unemployment, the ideas of engineering and religious socialists assumed front and centre in the SDAP. The older generation of Marxists had no clear answer to counter the unemployment problems in the short term. Meanwhile, a new generation of socialists had emerged in the party leadership. Hein Vos, Hilda Verwey-Jonker, Eduard van Cleeff, and Tinbergen were all either scientists or engineers who had incorporated the ideals of religious socialism into their scientific analysis of the unemployment crisis. In 1932, the "third generation of SDAP ideologues" gave a more concrete form to their political proposals by writing the "Labour Plan"—the first elaborate economic planning programme of its kind in the Netherlands.[135]

The idea of the Labour Plan again came from De Man, who had successfully launched a national Labour Plan in Belgium, proposing concrete measures to counter the immediate effects of the depression. The plan did not call immediately for the collectivisation of the means of production, but rather for government intervention in specific sectors of industry. In this manner, De Man hoped to rally a broad group of voters for this policy plans.[136] Banning wanted to attempt something similar in the Netherlands and convinced the leadership of the SDAP to establish a plan committee that would develop a plan similar to that of De Man, but for the Dutch economy. Tinbergen and Vos were the two economists who had to provide the economic underpinnings of the plan. Although the Labour Plan is today perhaps best known for its theoretic economic underpinnings by Tinbergen and Vos, producing the first macroeconomic model of the Netherlands in the process, psychological and ethical considerations were front and centre in the plan at the time.

In line with Tinbergen's writings, the unemployment measures of the plan were aimed at an increase in production to create more jobs. Government investments in existing industries, new public works, technological innovation, and rationalisation had to be the main drivers behind the production increase. However, the plan also emphasised that technological innovation and rationalisation no longer had to be seen as inevitable or uncontrollable. Such developments could only occur if they were in the worker's interest. Socialisation of the factory therefore meant, first and foremost,

---

135 Hilda Verwey-Jonker, "Vijfentwintig jaar socialistische theorie," in *Ir. J.W. Albarda, Een kwart eeuw parlementaire werkzaamheid in dienst van de bevrijding der Nederlandse arbeidersklasse*, ed. Emanuel Boekman and Herman Bernard Wiardi Beckman (Amsterdam: Arbeiderspers, 1938), 347.

136 Rulof, "Reclame en 'massapsychologische actie,'" 90.

that the interests of workers were to be considered in the rationalisation process.[137] This was not only an issue of the individual businesses, or between employers and the workers, but now also encompassed the whole of the national economy. The rise in productivity was no longer a goal unto itself, nor would it automatically bring about an improvement in the living conditions of workers. Furthermore, state pensions had to be provided for older workers who would lose their job due to rationalisation and did not have to go back to work. In addition, public schooling had to be provided for workers so they could be employed in new sectors. Schooling also served a secondary function in the transmission of culture. Culture could not be the preserve of the learned elites alone, the plan argued. If workers were provided with stable living conditions and a new, broader, shared culture, they could become fully participating democratic citizens.[138] As such, the aims of the plan were ultimately democratic in nature.

The Labour Plan presented itself as a more concrete, down-to-earth alternative to the theoretical questions of Marxism. The plan did not intend to provide an in-depth investigation in the nature of the current crisis of capitalism, nor was it intended to sketch a completely socialised society. Rather, it aimed to provide practical economic guidelines for socialist political action. In this context, Vorrink spoke about a "broad appeal to the feeling and imagination of the masses".[139] Meyer Sluyser, the editor of the socialist newspaper *The People* (*Het Volk*), wrote that the goal of the plan was to contribute to a "living and creative consciousness of the people".[140] This consciousness was to take shape through the organisation of political actions and campaigns. In short, the goal of the plan was to let citizens imagine socialism in concrete policies and give socialist movements concrete reachable goals. Socialist manifestations, Vorrink wrote, needed to

> [f]orm and maintain the joie de vivre and sense of community of the revellers. [The] festive gathering strengthens the courage and cheerful confidence of the single person who takes part in it as an organic part of a community.[141]

137 Hein Vos, *Het Plan van de Arbeid: Basis en Bouw* (Amsterdam: Uitgave Centrale Plan-Commissie, 1936), 51–52.

138 Hendrik Brugman, *Handboek voor het Plan van de Arbeid* (Amsterdam: Arbeiderspers, 1936), 48–49.

139 Koos Vorrink, "De zaal moet vol!," *Het Volk*, May 17, 1935.

140 Cited in: Rulof, "Reclame en 'massapsychologische actie,'" 101.

141 Koos Vorrink, *Feestcultuur: eenvoudige practische wenken voor het organiseren van vergaderingen en feestelijke samenkomsten* (Amsterdam: Culturele Raad van

Moreover, political action as a celebration of the community spirit had to provide an alternative to the leadership principles glorified by the fascists. Vorrink argued that instead of having a leader as the symbol of a political community, socialist politics had movements and actions. Consequently, the plan was primarily aimed at stirring the socialist imaginations, inspiring mass manifestations.[142]

Working on the economic underpinnings of the plan, Tinbergen adhered to the technocratic ideal professed by the engineering socialists by applying economic science to the imagination of political action. Instead of designating the scientist as the ideal political leader, the plan itself had to perform the function of binding the community together by shaping concrete action. However, a community alone was not enough. Moving towards a broad people's party, the SDAP started to slowly embrace the traditional institutes of liberal democracy. Moreover, the writers of the plan realised that implementing the proposed policies required the guidance of economic experts. To that end, they proposed the involvement of existing centres of economic expertise, such as the Dutch Central Bank and Economic Technical Institutes, as well as the soon-to-be-founded Business Cycle Bureau.

It is tempting to see the Business Cycle Bureau as a precursor to the Central Planning Bureau (CPB), founded after the Second World War, and indeed, many historians have done exactly that.[143] However, as I will argue in the next section, this is a rather inaccurate appraisal of the situation. The Labour Plan proposed to integrate economic expertise into the state apparatus in a different manner than proposed by the CPB. To understand this institutionalisation of economic expertise, it is important to first consider the theory of state present in the Labour Plan.


## 2.6 The State and Scientific Expertise

Neither Tinbergen nor Neurath conceived of initial planning theories as theories of state. The state as the central decision maker did not appear in their writings. Although the state was the obvious vehicle for economic planning,

N.V.V. en S.D.A.P, 1935), 6.
142 Vorrink, 10; see also: Rulof, "Reclame en 'massapsychologische actie,'" 90.
143  For example: Boumans, "De Slinger van Tinbergen"; van den Bogaard, "Economie als abstractie of als zingeving?"; Dekker, "Expert Institutions and Neoliberalism."

being the largest concentration of political power, ultimately it had to be replaced by something more democratic. Consequently, planning was aimed at different forms of democratic politics that omitted the state, focussing instead on the concrete way in which workers imagined themselves as part of a community and intermediate organisations, such as unions. However, this changed drastically during the 1930s, when social democrats started to turn their attention to the rule of law and the state (*Rechtsstaat*, in both German and Dutch). As I will argue in this section, this move towards the state was driven by two developments: first, the wish of religious socialism to transform socialist parties into people's parties; and second, the rise of fascism. To understand these developments in context, I will first reconstruct the development of thinking towards the state within the SDAP. Highlighting the contrast with the writings of Neurath, I will subsequently show how his direct experience with fascism led Neurath to formulate an alternative vision of the state. In the next section, I discuss how these conceptions related to the idea of scientific expertise. As will later become clear, the central notion that connected state and expertise was a particular conceptualisation of *the decision* typical of interwar thought. As I have noted in the previous chapter, histories of planning have mainly dealt with planning in an indirect manner. As such, there is still ground to be covered to connect early planning discussions with a theory of state.

For early social democrats, the state was representative of the interests of the ruling class, its laws designed to undermine the workers' action towards socialisation. Socialists of the non-revolutionary kind, such as Kautsky, had approved of the involvement of social democrats in parliamentary politics as a means of improving the conditions of workers, yet socialists had to abstain from any policy or compromise that would strengthen the position of the state.[144] Meaningful worker democracy was not to be given shape via the national parliament, but rather through the democratisation of the means of production. For many social democrats, the idea of decentralised workers' councils was a more attractive alternative to democratised factories. For example, inspired by the ideas of the British guild socialists, Pieter Jelles Troelstra had argued for a network of workers' councils, one for each sector of industry, which had to operate as autonomously as possible. A national central economic council, which he called the *economic parliament*, made up of representatives of each sector, was to oversee the coordination of the independent councils on a central level, making sure that their interests would

---

144 Karl Kautsky, "Der Staatssozialismus," *Der Sozialdemokrat* 50 (December 8, 1881), https://www.marxists.org/archive/kautsky/1881/state/1-statesoc.htm.

not clash. The state, in Troelstra's conception, was the organisation that made the coordination between the centralised and decentralised councils possible. However, in "good Marxist fashion" he believed that once this goal was achieved, the state would become superfluous and wither away.[145]

These ideals matched those of engineering socialists such as Bonger and Van der Waerden, however, they added scientific experts within each of the workers' councils in Troelstra's original concept. In a report from 1920, written in collaboration with the socialist workers union (*Nederlands Verbond van Vakverenigingen*, NVV), they argued that workers' councils could not solely consists of worker representatives, but that managers and the consumers of the products themselves also needed to be represented. In their technocratic ideal, the interest between these different factions had to be mediated by scientific experts. The state had no real role to play in this mediation beyond the initial installation and facilitation of these mixed councils.[146]

However, in the Labour Plan of 1935, political agents were no longer primarily drawn from the vocation they professed. Instead, first and foremost, they were free citizens. The idea of a workers' council or a mixed council could therefore no longer be an alternative to parliamentary politics. The only place where political subjects as free citizens could engage in free politics, was in parliament. Consequently, social democratic politics had to engage individuals not because they were workers, but because they were free citizens who shared the same socialist convictions. However, social democrats were not blind to the pitfalls of parliamentary politics, such as those already identified by Weber. Parliament could just as well be a "horse-trading" arena of interest groups.[147] Moreover, socialists were sceptical of the parliament's capacity to apply checks and balances to the power of the government and state bureaucrats.[148]

Addressing these problems, the SDAP rebranded their proposals for workers' councils as democratic additions to parliamentary politics. The

---

145 Marinus van der Goes van Naters, *Het Staatsbeeld der Sociaaldemocratie* (Amsterdam: De Arbeiderspers, 1930), 223–30.

146 Sociaal-Democratische Arbeiderspartij SDAP, *Het Socialisatievraagstuk* (Amsterdam: N.V. Boekhandel en Uitgevers-Mij "Ontwikkeling," 1920), 45–56; Nederlands Verbond van Vakverenigingen NVV and Sociaal-Democratische Arbeiderspartij SDAP, *Bedrijfsorganisatie en Medezeggenschap* (Amsterdam: N.V. Boekhandel en Uitgevers-Mij "Ontwikkeling," 1923), 25–32; van der Goes van Naters, *Het Staatsbeeld*, 230–32.

147 Weber, "The Politician's Work," 94.

148 Commissie tot vergelijkend onderzoek van politieke systemen, SDAP, *Het staatkundig stelsel der Sociaal-Democratie* (Amsterdam: Arbeiderspers, 1935), 113.
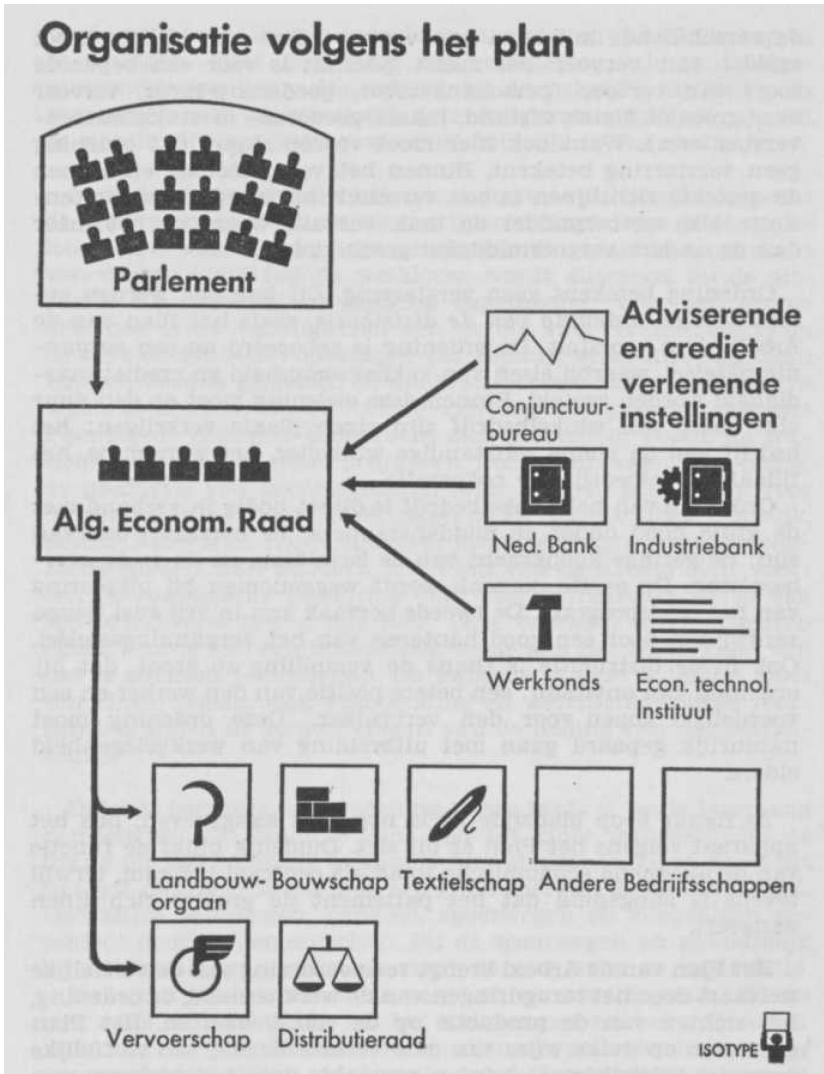
**Figure 2.2 "The Organisation According to the Plan", from Hein Vos, *Het Plan van de Arbeid: Basis en Bouw* (Amsterdam: Uitgave Centrale Plan-Commissie, 1936)**

A flow diagram representing the organisation of the state. The central decision-making organ was the General Economic Council, acting on behalf of the parliament with the help of a number of scientific advisory councils. The General Economic Council would subsequently delegate state tasks to workers' councils specific to each sector of industry.

workers' council was to be conceived as an intermediate organisation be-
tween state and civil society.[149] It would carry out state tasks, such as the
drafting of new laws, but not consist of civil servants, being comprised in-
stead of workers' representatives, employers, administrators, and consum-
ers. Councils also had to ensure the common good within the state, making
sure that the interest groups could not dominate state actions. The social
democrats envisioned that these representatives would be chosen from the
midst of those they represented and in theory, this would allow workers to
carry out the tasks of policymakers. As with Bonger and Van der Waerden's
proposal, scientific experts were also part of these new councils. Their task
was to guard the common good, facilitate discussion between the different
parties involved, and to help the untrained representative in drafting tech-
nical policies. In that sense, the scholarly persona of the scientific expert was
that of an educator.

Dutch social democrats were not alone in their turn towards the lib-
eral state. A similar development had already occurred in Germany, where
the *Sozialdemokratische Partei Deutschlands* (SPD) adopted the rule of the
*Rechtsstaat* as the primary means of defending the Weimar Constitution.[150]
In Austria, Neurath had witnessed the rise of fascism first-hand when the
social democrats were violently removed from Vienna's city council by the
fascist paramilitary *Heimwehr*. Neurath had fled to the Netherlands, from
where he continued his work on ISOTYPE and the *International Encyclopaedia
of Unified Science*.[151] Once there, he came into contact with figureheads of the
Dutch social democrats—amongst them Tinbergen.[152] These developments
led Neurath to leave his initial focus on workers' communities behind, start-
ing instead to take plural democratic societies as his prime focus for socialist
politics.

Unlike his German and Dutch counterparts, Neurath did not conceive
plural democratic societies as something only possible under the auspices of
the liberal state. Such a conception was inspired far too much by ideas on the
unity and person of the state that had loomed large in 19th-century German

---

149 Sociaal-Democratische Arbeiderspartij SDAP, *NIeuwe Organen* (Amsterdam:
N.V. De Arbeiderspers, 1931), 14.

150 Christopher Clark, *Iron Kingdom: The Rise and Downfall of Prussia, 1600–1947*
(London: Penguin, 2007), 640–54.

151 Cartwright, Nancy, Cat, and Uebel, *Otto Neurath*, 82–83.

152 Ferdinand Mertens, *Otto Neurath en de maakbaarheid van de betere samenlev-
ing*, SCP-essay (Amsterdam: Uitgeverij Aksant, 2007), 27; Uebel, "Introduction," 73.

thought.[153] As a born Viennese citizen, Neurath was likely influenced by legal discussions surrounding the constitution of the Austrian-Hungarian state in these matters. Ruling over a very plural society made up of multiple nationalities, ethnicities, religions, languages, and cultures, Austrian-Hungarian legal scholars tended not to stress the unity of the state, but rather conceived of it as overlapping spheres of influence.[154] How such a plural people could still engage with the same state politics was an issue that interested Neurath from a young age. In a letter to Tönnies in 1909, Neurath ponders the issue whether Czech migrants should be allowed to receive education in their native language in Vienna, or whether this would hamper their engagement in local political matters.[155] On Tönnies' advice, he consulted Hobbes' ideas on the "relation to religion, to state order and to tolerance", but found Hobbes' answer, in all likelihood, rather unsatisfactory.[156]

Twenty years later, Neurath found a more satisfactory answer in the writings of Hans Kelsen (the famous adversary of Schmitt and Heller, mentioned in the previous chapter).[157] Kelsen identified the state completely with the rule of law, or rather with a system of laws that could coerce individual subjects. Kelsen, like Neurath, was a product of the Austrian-Hungarian milieu, and abstained from deriving any unity of the state from something other than the law. His particular school of thought—that of *legal positivism*—also had close affinities with the Vienna Circle. Although Kelsen did not envisage legal scholarship as an empirical science,[158] by reducing individual laws to basic norms and testing the logical consistency of each one, his analysis bears some analogies with Neurath's desire to reduce scientific statements to observational sentences.[159] Neurath was in close contact with Kelsen upon

---

153  Michael Stolleis and Thomas Dunlap, *Public Law in Germany: A Historical Introduction from the 16th to the 21st Century* (Oxford: Oxford University Press, 2017), chap. 10.

154  Fillafer, "Imperial Diversity," 12.

155  Letter from Neurath to Tönnies, Summer 1909, Neurath Nachlass, Noord-Hollands Archief, Haarlem Wiener Kreis Archief, inventory number: 312.

156  Letter from Neurath to Tönnies, undated 1909, Wiener Kreis Archief: 312.

157  Letter from Neurath to Kelsen, March 3, 1936, Neurath Nachlass, Noord-Hollands Archief, Haarlem Wiener Kreis Archief, inventory number: 312.

158  Although Kelsen sought the use of Freud's psychoanalysis to explain and elucidate the workings of state and law, see: Clemens Jabloner, "Kelsen and His Circle: The Viennese Years," *European Journal of International Law* 9, no. 2 (January 1, 1998): 382–84, https://doi.org/10.1093/ejil/9.2.368.

159  Kelsen's reduction of the state to law was the anathema of later German law scholars such as Carl Schmitt and Hermann Heller, whose ideas I have discussed in the first chapter.

his return to Vienna and invited him to speak on multiple occasions at the gatherings of the Vienna Circle.[160] Although Neurath never fully embraced Kelsen's ideas, when searching for what makes liberal democracy possible, he similarly rejected any reference to an outside binding entity, such as the nation, religion, or language. Instead, he sought his own logical, consistent, basic norm for liberal democracy.

Near the end of his life, Neurath worked on a concrete theory of the state. Dying unexpectedly in 1945, these writings were never published during his lifetime and only recently came to light. As such, it is a part of his philosophy that has received little attention so far. However, as I hope to show, his ideas on the topic are a continuation of his earlier preoccupations. In *Visual Education* (1945), Neurath's focus is once again on the long-running themes of his work: ISOTYPE and education. In this final work, however, he brought these themes into explicit relation with a notion of the state. Historically, Neurath argued, the basic form of democracies was given in "an alternation of the administrators […] without internal strife".[161] For Neurath, this meant a willingness to cooperate and a commitment to the community that would dissuade people from directly revolting if decisions were taken that were not in accordance with their wishes. On this point, Neurath wrote: "[I]n a democracy, people expect that those who are overruled will nevertheless help faithfully in performing the decision."[162] Such loyalty entailed a "brotherhood of human beings with different ways of living".[163] Although Neurath stressed the shared communal bonds of the polis, he also stressed the plurality of such a society. Democracy was a form of cohabitation in which people of many different religious and philosophical creeds could collaborate. Doing politics in a democracy was thus not bound to any personal conviction, but crucially dependent on the collaboration of peoples with different convictions, and the neutral ground of these collaborations was the polis or the state.[164] Although he does not address the issue in this text, a standard liberal answer to the question of how such a democratic collaboration was possible—namely by imagining politics in a contractual form, and emphasising consensus and agreement based on mutual benefi-

160  Jabloner, "Kelsen and His Circle," 378.
161  Neurath, "Visual Education," 249.
162  Neurath, 249.
163  Neurath, 250.
164  In earlier work, Neurath had spoken about a global polis. However, in his later work, references seem to denote a specific, localised polis. See: Vossoughian, *Otto Neurath*, chap. 3.

ciary measures or the common good—was not sufficient for Neurath. Given his insistence on the community as defined by Tönnies, the "coherence of customs" in democratic collaboration—even amongst those with different ethnic or ideological backgrounds—had to be similarly based in "a personal pattern",[165] meaning participants in democracy had to have some customs in common.

For Neurath, having access to and possessing the same information was an important part of having a common basis in politics, which would then in turn form the ground for agreement. ISOTYPE could provide the perfect education via which to gain this common reservoir of knowledge necessary for democratic politics. Neurath stressed the "scientificness" of his method—its neutrality and public nature—which made visual statistics uniquely fitted as a basis for politics.[166] The neutrality of visual statistics arose from the fact that its language was not bound to any of the backgrounds of the groups that made up the polis. For example, language bound to a certain religious experience could be unproblematically used by members of a specific denomination, but for outsiders who did not have access to this experience, such language could never be fully understood and was therefore neither neutral nor public. Since in Neurath's conception, scientific language always had to refer to specific places and time—so-called protocol statements—it was public by its very nature. Precisely defined protocol statements could not refer to an experience unique to one particular group.[167] Thus, it was ISOTYPE's task to convey these neutral, public, scientific truths that allowed for collaboration in the political sphere.

Scientific facts, in their most basic form, were thus the ground for democratic politics. In the same way the law, in Kelsen's conception, bound a multiplicity of peoples to the state, and these laws were universal precisely on the grounds of their reducibility and logical consistency, so too, Neurath believed, were state politics grounded in the neutrality of scientific facts. Yet, unlike Tinbergen and the SDAP, Neurath did not fully embrace the state as the defender of liberal democracy. Instead, such politics were only possible if the state committed to neutral facts as the basis of democratic deliberation. Such deliberation on neutral grounds was more fundamental to the changing of administrations than any state could ever be.

Although scientific statements were, by their very nature, public, Neur-

---

165  Neurath, "Visual Education," 252.
166  Neurath, 260–61.
167  Cartwright, Nancy, Cat, and Uebel, *Otto Neurath*, 193.

ath was not entirely naïve when it came to the layperson's capacity to under-
stand scientific facts. There were important roles, both for educators who
could convey this information in a manner that was accessible to all, and
for experts who could assist politicians in particular technical tasks. Plan-
ning and politics, therefore, did not escape its dependence on a small group
of learned elites. In *Visual Education*, Neurath formulated the tension that
accompanied this quest for public knowledge and scientific expertise as fol-
lows:

> It is not in the interest of a government […] that the common man should
> be too well-informed. Democracy is in fact a constant struggle between
> the expert who knows everything and makes decisions, and the common
> man with just enough information to keep the power of the expert in
> check. […] Our period is as it were, dealing with the question, whether
> one wants to accept experts in making the decision or not.[168]

In the brief passage above, Neurath gives a poignant formulation of the issue
of the scientific expert in a liberal democracy. Like his fellow social demo-
crats in the SDAP, Neurath saw scientific expertise as crucial to liberal de-
mocracy in enabling the discussion between different parties within society.
By providing a common ground and an essential consensus in democra-
cies, science guarded the common good. The role of the expert remained,
first and foremost, that of educator, as experts were to provide free citizens
with the facts necessary to make political decisions. However, more than his
Dutch colleagues, Neurath sensed that the privileged position of the scientif-
ic expert was also problematic, as there was a real danger that experts would
occupy the seats of both politicians and citizens as decision makers in the
political process.

## 2.7 Scientific and Political Decisions

In his contribution to the *Congrès Internationaux d'Architecture Moderne*
(CIAM), Neurath had expressed a marked scepticism towards the idea of
experts making decisions. In the CIAM meeting of 1933 in Athens on the
theme of "the functional city", the Dutch architect and urban planner Cor-
nelis van Eesteren had argued for the involvement of the masses in urban

---

168 Neurath, "Visual Education," 251.

planning in order to establish the full potential of the functioning of the city. However, Van Eesteren made a clear delineation between the role of the planner on the centralised level and the role of the lay participant on the decentralised level:

> The central office can only issue guidelines and decide whether they [the guidelines] are being followed. The central office is like a scale that tries to achieve a balance between the various interests of the planned area. Decentralization can only lead to a harmonious totality if in general city planning grasp exists among those who carry responsibility for all that is executed and built[169]

It was again a clear expression of the technocratic ideal. Although Neurath and Van Eesteren shared the emphasis on the standardised representation of information that would allow every citizen to participate in the planning process, in his own contribution Neurath challenged Van Eesteren's concept of the centralised planner. Neurath argued that the only decision the expert needed to make was how to convert scientific information into educational material that was accessible to the masses. The expert did not make the centralised political decision itself.[170]

The reason why Neurath rejected the idea of a scientific expert as a central decision maker was that scientific knowledge alone could never force the adoption of one decision over the other. Scientific knowledge could point out multiple possibilities, but the ultimate decision was bound to the pattern of personal life. To better understand his rejection of scientific experts as central decision makers, it is worthwhile to briefly discuss Neurath's conception of the "decision" in a different context, namely that of the philosophy of science.

In *The Logic of Scientific Discovery* (1934), Karl Popper introduced the famous notion of the falsification criterium. The issue that Popper was dealing with could be formulated as follows: How do scientists decide on what findings to include in the corpus of scientific knowledge, and which findings to exclude? Popper's answer was surprisingly simple: It is only based on the negative result in a crucial test of a single statement that scientists can make a definitive decision to exclude it from the scientific body of knowledge. Although Neurath and Popper shared a commitment to a scientific

---

169 Cornelis van Eesteren, "Methoden des funktionelle Stätebaues und deren Anwendung in Amsterdam" (1933), cited in: Vossoughian, *Otto Neurath*, 125.
170 Vossoughian, 127.

worldview, upon its publication, Neurath published a very harsh criticism of Popper's book in the philosophical journal *Erkenntnis*.[171] He objected to Popper's approach on several grounds. First, he questioned the possibility of testing statements in isolation, appealing to Pierre Duhem's argument that a scientist could never make completely sure what caused an experiment to fail.[172] Or, to put it in more contemporary terms, a failure can never be precisely located in an experimental system since the correct functioning of each of the parts is dependent on the functioning of the whole. Second, Neurath rejected the idea that any pre-established criterium, rule, or method could determine what to include and what to exclude. Scientist always had to assess which finding would relate to which statement—something that could not be decided automatically. Although criteria for the communication of scientific knowledge aimed to make statements more precise, Neurath also acknowledged that unambiguous science was an illusion, not least as scientific language is always built upon natural language and therefore always contained ambiguities. In these instances, such ambiguities are comprised of elements that were not precisely specified, but that were necessary for the understanding of the whole.[173]

Neurath's discussion of the dynamics of scientific research invokes the same conception of "the decision" as was the case with politics. Neurath wrote: "[N]o 'unique system of the world' remains, such as the 'rationalists' expected to find behind the screen, but bundles of bodies of statements which all more or less fit into the whole of our scientific *pattern*."[174] In discussing decision making in a scientific context, he invoked the similar notions of "the pattern of personal life" that he had seen as the ethical basis of economics, and the basis for a global workers' community in *Personal Life and Class Struggle* (1928). For Neurath, this notion played an equally important role in democratic politics. It was on the whole of personal life that a political decision had to be based. In this way, such decisions would not exclude different backgrounds, cultures, religions, and/or philosophical ideologies and, in this sense, scientific facts could never be a complete substitute.

Instead of the central decision maker, in the alternative model Neurath

---

171 Neurath, "Pseudorationalism of Falsification."

172 Neurath, 127.

173 Jordi Cat, "The Popper-Neurath Debate and Neurath's Attack on Scientific Method," *Studies in History and Philosophy of Science* 26, no. 2 (1995): 219–50.

174 Otto Neurath, "Universal Jargon and Terminology," in *Philosophical Papers 1913–1946*, trans. Robert S. Cohen and Marie Neurath, Vienna Circle Collection (Dordrecht: D. Reidel Pusblising Company, 1983), 215, emphasis added.

promoted, scientific expertise provided background information for the political decision. In *Visual Education*, Neurath uses the analogy of building a railway to communicate the role of the scientific expert in the political decision:

> All atlases show the same physical features in a certain stretch of country, but there may well be different views as to which is the most suitable route through it for a railway. When the railway is actually built, however, there has to be a compromise of these different views.[175]

In the above analogy, atlases (as scientific public knowledge) give various possibilities for how and where the railway can be constructed. Yet many possibilities remain that are dependent on the personal viewpoints of the (political) actors involved—that is, the "whole pattern of personal life", which also includes non-scientific considerations. Although the decision has to be based on a compromise between the different personal convictions, the availability of public knowledge helps map out the different alternatives in neutral language and thus facilitates compromise.

Neurath's rejection of the scientific expert acting as decision maker was a typical example of the interwar worries concerning the application of rules. The idea that the decision-making process—whether economic, scientific, or political—could be replaced by automation or pure rule-following was, for Neurath, a form of pseudo-rationality: a misplaced overreach of the capacity of scientific reason; a speculative assumption that science could explain everything. In this sense, the writings of Neurath echo the sentiments of Weber, warning that scientists should be careful that the creative, insightful scientific moment is not trampled underfoot by rules and procedures. Such concerns directly related to wider concerns about democracy, as the scientist as decision maker was conceived by both Weber and Neurath as a typical outcome of a rationality that was out of control.

However, in contrast to Neurath, Tinbergen took a different approach to the role of scientific expertise in liberal democracy. For Tinbergen, the scientific expert was not only able to provide a map of the different possibilities involved in a political decision, but also had to bring political preferences and ideologies into accordance with one another and show which decision would best serve the common good. Moreover, where Neurath stressed the public nature of scientific facts, Tinbergen considered science ultimately too

---

175  Neurath, "Visual Education," 251.

esoteric for this purpose. Although Tinbergen and Vos had made use of the ISOTYPE in the writing of the Labour Plan (and would indeed continue to use the method in the communication of their scientific facts), Tinbergen's model of choice was the macroeconomic model. Such a model was too technical to be understood by the layperson, but could, with the assistance of the expert, be used by non-scientists in the decision-making process.

As mentioned previously, Tinbergen had developed his first macroeconomic model for the drafting of the Dutch Labour Plan in 1935. However, when he published this model a year later, the purpose of the model had been significantly altered. Tinbergen published his model as part of the preliminary advice from the Society for Economics and Statistics—a yearly publication addressing one specific political question towards which society invited economists to contribute. The question in 1936 was how the business cycle could be improved, and specifically whether this could be done through government intervention, given that the export position of the Netherlands was unlikely to change.[176] Instead of rendering his model as a blueprint for political action, as he had done with the Labour Plan, Tinbergen shed all of his commitment to party politics in his answer to the Society for Economics and Statistics. Tinbergen presented himself as the neutral, disinterested scientist focussing on a very factual analysis of the situation. However, this did not mean that his writing was a-political, as the contribution had a clearly defined political goal. Like Neurath, Tinbergen saw his model as a tool to map out the different feasible alternatives to tackle the problem of the business cycle, leaving it up to the politicians to decide which alternative was desirable. Moreover, he stressed:

> Only a systematization of the relationships, as has been attempted here, can lead to fruitful discussions in my view. It is almost inconceivable that without an accurate localization of the differences of opinion one will understand each other and move forward.[177]

---

176 Henricus Antonius Kaag et al., *Kan hier te lande, al dan niet na overheidsingrijpen, een verbetering van de binnenlandse conjunctuur intreden, ook zonder verbetering van onze exportpositie? Welke leering kan ten aanzien van dit vraagstuk worden getrokken uit de ervaringen van andere landen?*, Prae-adviezen van de Vereniging voor de Staathuishoudkunde en Statestiek (The Hague: Nijhoff, 1936).

177 Jan Tinbergen, "Kan hier te lande, al dan niet na overheidsingrijpen, een verbetering van de binnenlandse conjunctuur intreden, ook zonder verbetering van onze exportpositie? Welke leering kan ten aanzien van dit vraagstuk worden getrokken uit de ervaringen van andere landen?," in *Praeadviezen voor de Vereniging voor de Staathuishoudkunde en de Statistiek* (The Hague: Nijhoff, 1936), 106.

## Overzicht der elementaire vergelijkingen.

1. $l - l_{-1} = 0.27 \, (p_{-1} - p_{-2}) + 0.16 \, a.$

2. $p = 0.04 \, p'_A + 0.15 \, (r'_A + 2 \, l - 6 \, t) + 0.08 \, u.$

3. $q = 0.74 \, q'_A + 0.16 \, (s'_A + 2 \, l - 6 \, t)$

4. $p_A = 1.28 \, p_W + 0.04 \, (r'_A + 2 \, l - 6 \, t).$

5. $u = u_A + u'.$

6. $u_A = z + 2.23 \, (p_W)_{-0.25} - 1.26 \, p_A.$

7. $u' = L + E' - 2.49 \, p.$

8. $v'_A + 3 \, y'_A = 0.51 \, Z_{-1}.$

9. $a = b + 0.20 \, u'_A + 0.98 \, x'_A.$

10. $y'_A = 0.69 \, b.$

11. $u = 1.72 \, u'_A + 4.35 \, x'_A.$

12. $x'_A - 0.71 \, u'_A = -0.42 \, p + 0.39 \, p'_A.$

13. $y'_A - v'_A = 0.86 \, (q'_A - q).$

14. $L = a + l.$

15. $Z = I + U' + U_A + 3 \, b + 0.71 q - L - X'_A - U'_A - Y'_A + 0.24 \, [s'_A - (s'_A)_{-1}]$
$+ 0.38 \, [r'_A - (r'_A)_{-1}] + 0.47 \, [p'_A - (p'_A)_{-1}] + 0.3 \, (Z - Z_{-1}).$

16. $E = 0.48 \, Z + 0.20 \, Z_{-1}.$

17. $E' + E'_{-1} = 0.26 \, E_{-1}.$

18. $E'' + E''_{-1} = 1.74 \, E_{-1}.$

19. $U_A = u_A + 0.88 \, p_A.$

20. $U' = L + E'.$

21. $U'_A = u'_A + 0.58 \, p'_A.$

22. $V'_A = v'_A + 0.13 \, q'_A.$

23. $X'_A = x'_A + 0.41 \, r'_A.$

24. $Y'_A = y'_A + 0.13 \, s'_A.$

**Figure 2.3** "Overview of the Elementary Equations", from Jan Tinbergen, *Praeadviezen voor de Vereniging voor de Staathuishoudkunde en de Statistiek* (The Hague: Nijhoff, 1936)

As is immediately clear from the list of equations above, Tinbergen's early macroeconomic models were not intended to be used by the politicians themselves, requiring an economic expert to act as intermediary.

The systematisation of relationships that Tinbergen spoke of was his macroeconomic model, as it had the goal of bringing different economic developments into one system and investigate their interdependent relationships. However, beyond this epistemic purpose, there was also a clearly stated political goal, as the model would render different positions in the debate mutually intelligible. The use of the model was therefore instrumental in fostering discussion between different political ideologies.[178]

There was a twist, however. Tinbergen's model not only rendered different political positions commensurable, but also suggested what would be the most effective alternative to choose in a political decision.[179] Unlike Neurath, Tinbergen believed that his model actually had the computational power to show what the best decision was. The choice could therefore not be founded upon a pattern of personal life—a worldview specific to local customs—but in the most efficient alternative, at least if the politician wished to do so. Therefore, Tinbergen's ideal of the engagement of the scientific expert with the politician or representative differed fundamentally from that of Neurath. Where Neurath considered the role of the expert in mapping out the alternatives before the political discussion could start, Tinbergen thought that the alternatives could only be formulated by experts in conversation with the politicians and representatives. The theories and convictions of the representatives were an important part of the model. It gave the scientist clear guidelines as to what kind of relationships had to be found in the economic system that, importantly, it could not discern on its own. The model was in that sense neutral, as it encompassed the political convictions of all parties involved.[180] In the end, the computational power of Tinbergen's model did not mean that scientific experts could decide for the politician. Tinbergen was keen to stress that the politician could always choose a less efficient alternative based on extra-economic considerations. Some measures were simply not politically popular with the people, or could undermine other aspects of

178 Adrienne van den Bogaard, "The Cultural Origins of the Dutch Economic Modeling Practice," *Science in Context* 12, no. 02 (June 1999), https://doi.org/10.1017/S0269889700003458; See also: Adrienne Van den Bogaard, *Configuring the Economy; The Emergence of a Modelling Practice in the Netherlands, 1920–1955* (Amsterdam: Thela-Thesis, 1997), chap. 2.
179 Vereeniging voor de Staathuishoudkunde en de Statistiek VSS, *Verslag van de Algemeene Vergadering Gehouden Te Amsterdam Op Zaterdag 24 October 1936* (The Hague: Martinus Nijhoff, 1936), XXX; see also: Maas, *Economic Methodology*, 48–49.
180 Harro Maas, "Calculators and Quacks: Feeling the Economy's Pulse in Times of Crisis," *Research in the History of Economic Thought and Methodology* 36B (October 2018): 27–29, https://doi.org/10.1108/S0743-41542018000036B003.

society, such as culture, or the freedom of citizens.

Although the model did not decide for the politician, it did, however, frame the decision in a specific manner. Political worldviews were only taken into account in so far as they could be turned into the mathematical relations of the model. The model also emphasised, as Neurath's writings had done, that the autonomy of politics in relation to science was to be located in the decision—a consequence of the fear of rules that permeated interwar thought. Unlike the arguments of Bonger and the engineering socialists, science and politics did not to find their synthesis in the figure of the technocratic leader. Instead, the collaboration between scientist and politician, with the help of the macroeconomic model, was the ultimate convergence of politics and science. As with the Labour Plan, the bringing together of ethical convictions and science as an agent of modernity was not to be found in the person of the leader. As an alternative, the planning programme of the model was to direct political action, understood here as the decision.

## *Conclusion*

Interwar planners believed that they were witnessing the dissolution of capitalism. However, this was not an ideal theory of how history would develop in the face of economic crises, as perhaps it had been for an older generation of Marxists. They witnessed very concrete phenomena: increased monopolisation, governments turning towards social policies, an increase in productivity, newer forms of shop-floor organisation, and the emergence of the modern manager. Capitalism no longer functioned in the same chaotic manner as it had in the 19th century and was no longer the liberal ideal of fair competition. Instead, capitalism became increasingly ordered, and increasingly started to resemble a planned economy. Yet it was not only social and economic developments that pushed the movement of modernity forwards. Interwar planners, such as Neurath and Tinbergen, stressed the role of science in spurring on the ordered economy. Technological innovation leading to an increase in productivity was reimagined as the fruits of scientific discovery and the engineer became more scientifically minded, applying the same abstract logic. The use of statistical methods gave managers, bosses,

unions, and governments insights into the inner workings of the economy. Science was part of modernity and scientists in their tireless efforts were pushing modernity ever forwards. However, a more ordered economy was not necessarily a more just economy; modernity did not automatically lead to an improvement in the living conditions of the workers. If scientific innovations remained in the hands of the ruling elites, they would become a dangerous tool with which to oppress the masses. Such a conception of science and the economy coincided with a larger imagination of modernity in which cold abstract rules governed society, alienating the individual.

In this conception of modernity, planners gained a new role. It was not the planners' mission to transform the unruly economic forces of capitalism into a planned economy from scratch—the herculean task they undertook in the young Soviet Republic. As modernity was already pushing the economy towards order, planning had to seize this development and spur it on. Consequently, planning had to start with the concrete developments that could be directly witnessed. However, the task of planning was urgent and planners could not sit back and wait for the forces of capitalism to do their job, not least as modernity could also increase the wealth of, and concentrate power in the hands of, a small elite. Rationalisation, technological innovation, and the use of statistics were not necessarily negative forces for the worker (although they could be), and it was the planner's task to employ the fruits of science for the benefit of the worker. In the light of a rapidly advancing modernity, interwar scientists understood their historical agency in accordance with larger historical developments. Whilst modernity was inescapable, scientist were still free actors in so far as they could assume responsibility for modern developments, accept this fate, and attempt to steer modern circumstance towards the common good, making the future not only more modern, but also brighter.

However, employing science for the emancipation of the worker was not a purely technical issue. Designing mechanisms that distributed wealth equally was not enough. The alienation of mechanisation and scientific logic also threatened culture, the community, and the very spirit of the worker. This community spirit was developing at a different pace from the stormy energy of modernity and would be trampled underfoot by this historic development unless care was exercised. Modernity was in danger of splitting the human experience in two: one of abstract modernity, and one of everyday experience and ethical values. Neurath and Tinbergen sought to prevent this rift and focussed their efforts on the question of how planning might foster workers' communities, combining technological knowledge and ethi-

cal concerns. In doing so, they linked the traditional (workers') community with the onward march of modernity, creating a new sense of historicity.

This focus on the community spirit of workers led to a remarkable absence of the state in early planning theories. However, before long, as the social democrats broadened their scope from the workers' communities alone to the community spirit of all citizens, the state emerged. Initially the state functioned not as a centre for planning decisions, but more as the representation of all the different communities that made up society. The rise of fascism made this turn towards the state all the more urgent as legal means appeared for social democrats to hold the most promise to combat illiberal forces. This liberal turn, however, brought with it a new complex issue for plan economists: Who was to make the decisions of the state? In the context of the emergence of the modern manager, planners had embraced the idea of technocracy. Yet this had not been a technocracy *of* the state, but rather served the decentralised fostering of political communities. Planners rejected the idea the state could not be led by a "super manager", not least as this would go against their recent embrace of liberal politics.

I have argued that planning, in its turn towards the state, had to move away from the Marxist idea of the state as a representation of class interests and reimagine it instead as an entity for the emancipation of workers. This meant that the ills of the modern state—its bureaucratisation and its function in the hands of the ruling elite—had to be overcome. Dutch social democrats argued for the installation of representative councils that could take over state tasks and operate in a less bureaucratic manner. Just like planning had to bridge the gap between an ordered economy and the fostering of a workers' community, planning had, in these councils, to allow non-bureaucrats to make policies: to bring policymaking into the hands of average citizens. Planning and technocracy were thus deliberately counter-posed to bureaucracy. Yet, just as Tinbergen repurposed his macroeconomic models for this precise goal, he also established the roles of the economic planner and the scientific expert as instrumental for the functioning of the state.

In the turn towards the state, the three axes of the interwar planning debate—the duality of modernity between community and society; the nature of scientific expertise; and bureaucracy and the state—that I have discussed, intersect. The scientific expert was the new persona of the committed scientist, and the alienating effects of bureaucracy and partial interest groups had to be averted by involving average citizens in the planning process. Planning produced tools that made this democratic ideal of scientific expertise possible, be it Neurath's visual statistics or Tinbergen's models. Central to this in-

tersection of discussions was *the decision*. Such decisions could only be taken based on values that escaped the grasp of science—a personal pattern of values that considered social wholes, such as the community. Science could not make the political decision, but it could map out possible decisions. What emerged, I argue, is a social imaginary of the state and society with the concept of the decision as its focal point—what I call the *decisionist imaginary*. By mapping out the decisions of the state and providing the people with the tools to discuss the many options, planning attempted to make society truly democratic.

# CHAPTER 3.

# The Ideology of Progress:
## Cold War Rationality and Instrumental Expertise, 1945–1965

*That man has to make here and now decisions which run ahead of his potential wisdom and therefore fall short of it goes without saying; but his planning and guessing, his designs and decisions, far-reaching as they may be, have only a partial function in the wasteful economy of history which engulfs them, tosses them, and swallows them.*

— Karl Löwith, *Meaning in History* (1949)[1]

## Introduction

"Un-futurerisation" was what Fred Polak, the director of the Dutch Central Planning Bureau (CPB), called the predicament of his age. In 1955, his diagnosis suggested that the post-war era was falling prey to *temporalism*—the tendency of a culture to lock itself up in the present.[2] Polak was understandably worried: The progress of history—the idea that human kind was acting in accordance with the forward motion of modernity, so central to early planning debates—had, in the eyes of a number of influential post-war intellectuals, become deeply suspicious. The Jewish-German emigre Hannah Arendt wrote from the United States that progress had become an empty

---

1 Karl Löwith, *Meaning in History: The Theological Implications of the Philosophy of History* (Chicago: University of Chicago Press, 1949), vi.

2 Fred Polak, *De Toekomst is Verleden Tijd*, vol. 2 (Utrecht: Uitgeversmaatschappij W. de Haan N.V., 1955), 89.

concept that could no longer guide politics. The only thing that remained was the historical variance to which progress subjected all of humanity, dissolving the distinction and meaning of human action. It had made liberal democracy ripe for totalitarian ideology in which only the bending of reality to the will of the leader remained a possible political principle.

Arendt's critique on progress was inspired by her experiences with the Nazi regime, but her analysis was also clearly informed by developments in post-war social sciences. Behaviourism, the school of thought that emphasised observable imputes and reaction over consciousness or intention, was taking the social sciences by storm in the United States—a development in which lurked, Arendt recognised, the same dangers as now beset progress. Behaviourism, she argued, imposed "innumerable and various rules, all of which tend to 'normalize' its members, to make them behave, to exclude spontaneous action or outstanding achievement" and as "if men were endlessly reproducible repetitions of the same model."[3] In this manner, behaviourism had overtaken all realms of human life, making the distinction between private and public, and labour and action, meaningless. Economic planning now seemed to combine these two evils, offering only an empty, inescapable progress by basing forecasts on "innumerable and various rules" and "endlessly reproducible repetitions."

Arendt believed that these rules and repetitions were driven by the mathematical and computational tools that economics, sociology, and the political sciences now employed.[4] She alluded to a set of relatively new tools, which found their origin in the US mobilisation effort in the Second World War. Cybernetics, game theory, revealed preference theory, rational choice theory, and bounded rationality were techniques developed in the early years of the Cold War that described human behaviour as completely rational and bound to an axiomatic set of rules. Human behaviour could be explained by referencing the preferences of human agents and the rules they applied to optimise the strategies to satisfy those preferences.[5] Arendt was correct to

---

3 Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1958), 8, 40, 45.
4 Arendt, 191.
5 Peter Galison, "The Ontology of the Enemy: Norbert Wiener and the Cybernetic Vision," *Critical Inquiry* 21, no. 1 (1994): 228–66, https://doi.org/10.1086/448747; Philip Mirowski, *Machine Dreams: Economics Becomes a Cyborg Science* (Cambridge, UK: Cambridge University Press, 2002); Sonja M. Amadae, *Rationalizing Capitalist Democracy: The Cold War Origins of Rational Choice Liberalism* (Chicago: University Of Chicago Press, 2003); Joel Isaac, "Tool Shock: Technique and Epistemology in the Postwar Social Sciences," *History of Political Economy* 42, no. Annual Supplement

associate these techniques with economic planning. Indeed, during Polak's tenure as director, the CPB applied macroeconomic and decision models that were based on this type of rule-bound rationality, presenting a model of the human being as a strategically acting individual.

The human actions described by these Cold War tools closely resembled the vision of the human-machine that interwar scholars had so abhorred. In 1928, Carl Schmitt had given a description of what to him sounded like a dystopian vision of the future, in which "public opinion" consisted solely of individual private preferences aggregated by some kind of apparatus:

> It is fully conceivable that one day through ingenious discoveries, every single person, without leaving his apartment, could continuously express his opinions on political questions through an apparatus and that all these opinions would be automatically registered by a central office, where one would only need to read them off. That would not be an especially intensive democracy, but it would provide proof that the state and the public were fully privatized.[6]

Such an apparatus in which public opinion was reduced to a totality of private opinions had virtually become a reality in the post-war planning tools that the CPB employed. The bureau's *decision models* understood democracy to consist in aggregated individual preferences into a collective preference for specific policies. Such preferences could then be studied as if they were consumer behaviour of private actors. The idea of community, which had played such an important role in interwar planning, disappeared and only private choices could inform democratic policymaking.

Yet how could this remarkable shift have occurred? Historians of science have argued that social scientists became so enamoured with their models that they gradually (mis)took the image of politics contained in those models as reality, consequently foregoing any reference to community or the indeterminacy of decision-making.[7] Other scholars have argued that the ideology of the Cold War pressured social scientists into adopting new tools and new notions of democracy. The image of politics revolving around egoistic

---

(2010): 133–64, https://doi.org/10.1215/00182702-2009-075.

6 Carl Schmitt, *Constitutional Theory* (Durham, NC: Duke University Press, 2008), 274.

7 Mirowski, *Machine Dreams*; Paul Erickson et al., *How Reason Almost Lost Its Mind: The Strange Career of Cold War Rationality* (Chicago: University of Chicago Press, 2013).

rational actors served as a justification of liberal capitalist democracy.[8] In that sense, the description of the human agent in terms of rational behaviour has been dubbed "Cold War rationality." Each explanation, however, comes with its own shortcomings. For one, the image of the social engineer as the controller of political systems is inadequate. As I will describe at length in the fourth section, the existential primacy of the decision over rule-following—as the interwar conception of decisions entailed—did not completely disappear, nor did the ethical concerns of the scholarly persona. In addition, economic planners such as Tinbergen and Polak were never ideological warriors who wanted to legitimise the liberal capitalist democracy against communism. Their appreciation of socialism and liberalism was more more nuanced than that. For example, Tinbergen, on the basis of his models, argued that communism and capitalism were more alike than most Cold War liberals were prepared to admit.

As I will argue in this chapter, the two explanations offered above for the embrace of the rule-bound image of rationality by social scientists can be supplemented by a third understanding. As the example of the two antipodal views of Polak and Arendt already show, the conceptualisation of historicity and the meaning of progress played a crucial role in the appreciation of Cold War rationality. This change in the conceptualisation of modern historicity can be discerned in the conceptual shift the notions of *ideology* and *progress* underwent during this period. Ideology no longer revolved around competing political world views, but rather around a single, totalising, distorting viewpoint that had become pervasive throughout society.[9] Similarly, progress became a single totalising horizon of modernity, swallowing up every development in history. The horrors of the Second World War and the atrocities committed by the Soviet Union were thought to be justified in reference to this inescapable march of history.[10] Both of these shifts can be related to

---

8 Amadae, *Rationalizing Capitalist Democracy*; Michael A. Bernstein and Allen Hunter, "The Cold War and Expert Knowledge: New Essays on the History of the National Security State: Editors' Introduction," *Radical History Review* 63, no. 1 (1995): 1–6, https://doi.org/10.1215/01636545-1995-63-1; Mark Solovey and Hamilton Cravens, eds., *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature* (New York: Palgrave Macmillan, 2012); Joy Rohde, *Armed with Expertise: The Militarization of American Social Research during the Cold War* (Ithaca: Cornell University Press, 2013).

9 Howard Brick, "The End of Ideology Thesis," in *The Oxford Handbook of Political Ideologies*, ed. Michael Freeden and Marc Stears (Oxford: Oxford University Press, 2013), 91–111, https://doi.org/10.1093/oxfordhb/9780199585977.013.0033.

10 Emilio Gentile, "Total and Totalitarian Ideologies," in *The Oxford Handbook of Political Ideologies*, ed. Michael Freeden and Marc Stears (Oxford: Oxford University

a reconfiguration of modern historicity—something I refer to as a *Cold War historicity*.

This new understanding of modernity was not an optimistic view: Both the presence and absence of ideology and progress left humanity in a predicament. Either one was to fall prey to the totalitarian lure, or no horizon for the improvement of society remained. The main point of this chapter is that the adoption of rule-bound rationality and system models by social scientists can be understood as an attempt to escape this lamentable fate. However, as Arendt and other political theorists such as Judith Shklar point out, this flight had fundamental implications for our understanding of democracy.[11] Through an extended case study of the decision models developed at the CPB (in sections seven to nine), I show how the planning tools of the Cold War were primarily focussed on opinion, preference, policy, and efficiency. As a result, and over time, democratic issues such as public debate, education, and participation took a backseat. Furthermore, the modus operandi of socio-economic planning drastically changed under this new mode of historicity and these new tools of social science. To put it in my own terms, the *decisionist imaginary*—that locus of state power, democracy, and scientific expertise—was reconceptualised.

This chapter consists of a comparison of the discourses on modernity and planning in the United States and the Netherlands in the first two decades of the Cold War. Since there already exists much literature on these subjects in the US context, I will use the example provided by the United States to guide our understanding of the Dutch case. However, this does not suggest that the understanding of the Cold War was the same in both countries, and it is important to take national differences into account. Nonetheless, the fact that planning efforts changed in character under the pressure of a new understanding of historicity can be discerned in both contexts.

The first three sections will be devoted to the US case, sketching the conceptual shift of ideology and progress in the first three sections, whilst discussing the development of the Cold War rationality in the US context in the fourth. The remainder of the chapter will consider the Dutch case. The fifth section discusses the understanding of modernity in the Netherlands after the war, whilst the sixth section shows how this impacted efforts to establish an independent agency for economic planning—the CPB. How the planners of the CPB reacted to this new conception of historicity and how

---

Press, 2013), 56–72, https://doi.org/10.1093/oxfordhb/9780199585977.013.0035.

11 Judith Shklar, *After Utopia: The Decline of Political Faith* (Princeton, N.J: Princeton University Press, 1957).

it led them to adopt the tools of Cold War rationality is covered in sections seven, eight, and nine (in which I take the decision models developed by the CPB as exemplary). Finally, section ten examines how Tinbergen imagined a future beyond Cold War politics.


## 3.1 Totalitarian Ideology

Ideology has always been a polysemic and contested notion. Very early in its existence it became a derogatory term, denoting those intellectuals who put the sphere of pure ideas above the "messy" reality of politics—even if Antoine Destutt de Tracy, who coined the concept, had intended a completely different meaning. In *The German Ideology* (1846),[12] Karl Marx and Friedrich Engels used the notion to criticise the Young Hegelians, who theorised the development of ideas outside of their material conditions.[13] For reformist Marxists, such as Eduard Bernstein, ideology was that set of morals, opinions, ideas, and principles that guided political action yet lacked a scientific basis. The liberal bourgeoisie had their ideology, as did the conservatives. For them, the working class had to similarly develop their own ideology to combat those of the other social classes and political movements. In general, from the late 19th century onwards, the term came to mean the set of principles from which political movements built their vision of society and guided their actions. Ideologues were those intellectuals bound to a political organisation that safeguarded those principles and the coherency of the overall political programme.[14]

In the interwar period, ideology started to take on a new meaning, which gained prominence after the Second World War. The seminal text of this shift in meaning was Karl Mannheim's *Ideology and Utopia* (1929).[15] In-

---

12 *Die deutsche Ideologie* was published in fragments in 1903, and only as complete text in 1932: Karl Marx and Friedrich Engels, *Die deutsche Ideologie* (Vienna: Verlag für Literatur und Politik, 1932).

13 The Young Hegelians were a group of radicals and progressive followers of Hegel who, in contrast to the so-called "Old Hegelians" believed that history was still to advance to a next stage.

14 Bo Stråth, "Ideology and Conceptual History," in *The Oxford Handbook of Political Ideologies*, ed. Michael Freeden and Marc Stears, 2013, 7–9, https://doi.org/10.1093/oxfordhb/9780199585977.013.0013.

15 Originally published in German as *Ideologie und Utopie*, published in a revised English edition as: Karl Mannheim, *Ideology and Utopia: An Introduction to the Sociology of Knowledge* (New York: Harcourt, Brace and Company, 1936).

spired by developments in psychology—especially *gestalt* psychology—ideology, in Mannheim's interpretation, took on connotations associated the German word *Weltanshauung*, denoting both the background on which phenomena could be discerned and acquired meaning, and their illusory nature, as exemplified by the optical illusions analysed by *gestalt* psychologists. In other words, ideology was a distorted vision that took ideas to be reality.[16] Spurred on by the fear of a rule-driven bureaucratic state system—the same fear prevalent in the writings of Max Weber (as discussed in the previous chapter), encompassing all political vocations—Mannheim thought that the older functions of ideology, the formation of a group identity, and the intellectual justification of politics, would become obsolete.[17] In this new formulation, ideology became exclusively associated with the ruling classes as the ideas that guided government. It thus denoted the comprehensive yet distorting systems of ideas of different ruling elites.[18]

Mannheim's analysis suggested that ideology in its new meaning was everywhere, projected downwards through the whole of society as a driving force behind the administrative state. Yet as its old meaning had withered away, no ideological opposition were to be found between the competing political organisations. Ideology thus seemed to have disappeared but could, at the same time, be located throughout society.  This ubiquity and absence constituted a *duality* of ideology, which became the defining feature of its post-war understanding. In this dual interpretation, ideology served as a distinction between the free liberal societies *vis-à-vis* the dictatorships of Nazi Germany and the Soviet Union. The latter two had a single, large, all pervasive ideology that contaminated all of society undoing the critical potential of civil society and independent citizens, whilst liberal societies were free of ideology.[19] Consequently, ideology became caught up in the emerging discourse on totalitarianism that subsumed both Nazi Germany and the Soviet Union as two incarnations of the same evil.[20] Popular books on the matter of the period that captivated public opinion include Arthur Koestler's *The*

---

16 F. Warren Rempel, *The Role of Value in Karl Mannheims Sociology of Knowledge*, *The Role of Value in Karl Mannheims Sociology of Knowledge* (The Hague: Mouton, 1965), 17.

17 Mannheim, *Ideology and Utopia*, 233.

18 Mannheim, 176–77.

19 Abbott Gleason, *Totalitarianism: The Inner History of the Cold War* (New York: Oxford University Press, 1997), 144.

20 James Chappel, "The Catholic Origins of Totalitarianism Theory in Interwar Europe," *Modern Intellectual History* 8, no. 3 (November 2011): 561–90, https://doi.org/10.1017/S1479244311000357.

*God That Failed* (1950), and *The Captive Mind* (1953) by the Polish defector Czesław Miłosz. Both were personal accounts by ex-communists who wrote about Marxism as a captive manichaeistic mindset—a delusional worldview in which only those truths that conformed to a predetermined pattern were accepted.[21] The ideological mind was unable to deal with outside reality and thus closed itself off. Totalitarianism cultivated closed minds through propaganda, turning its citizens into mindless followers of the core principles of the state.

Simultaneously, this Cold War image of ideology was also projected onto the liberal "West," both by critical theory scholars and by conservative voices. Liberalism was also an ideology that dominated democratic politics, and totalitarianism was an evil that still lurked in liberal culture, even if it remained dormant in the aftermath of the Second World War. Members of the Frankfurt School of Social Research such as Theodor Adorno, Max Horkheimer, and Herbert Marcuse, who gained a new audience in the United States after fleeing their native Germany, identified totalitarian ideology in the whole of liberal culture, especially in popular culture. For Adorno, ideology turned ideas and behaviour into total identities that encompassed both their counter concepts and negatives; a stringent interpretation in which everyone had to act out predetermined roles with no possibility of alteration, development, or subversion.[22] At the other end of the political spectrum, another German Jewish émigré, Leo Strauss, argued that modern liberalism had, under the influence of German historicism and relativism, taken a dangerous path in which no fixed natural order was possible. If society were imagined as malleable, fixed boundaries disappeared, making the human subject bend to the totality of the system's ideology.[23]

What drove these interpretations of ideological totalitarianism in both the West and the East was the emergence of a post-war political culture of consensus, consumer satisfaction, mixed economies, and economic planning. In the United States, the Netherlands, France, Germany, and much of the capitalist Transatlantic Alliance, social democrats, Christian democrats, and liberals had subdued their animosity towards each other and under the

---

21 Gleason, *Totalitarianism*, 205–9; George Reisch, "Aristotle in the Cold War: On the Origins of Thomas Kuhn's The Structure of Scientific Revolutions," in *Kuhn's 'Structure of Scientific Revolutions' at Fifty*, ed. Robert Richards and Lorraine Daston (Chicago: University of Chicago Press, 2016), 23–24.

22 Theodor W Adorno, *Minima Moralia: Reflections from Damaged Life*, trans. E. F. N Jephcott (London: Verso, 1978), 45–47.

23 John G. Gunnell, "Political Theory and Politics: The Case of Leo Strauss," *Political Theory* 13, no. 3 (1985): 343.

auspices of the Keynesian ideas engaged in the planning of the free econo-my. In Europe, the prevailing sense was not only that a broad coalition was necessary for the reconstruction of a war-torn continent, but also that more radical voices, such as those of the communist party, had to be excluded.[24] Planners such as Tinbergen and Ragnar Frisch argued that the apparent opposition between free markets and planned economies was not so pro-nounced and developed planning tools to accommodate this marriage of social policies and economic development.[25] However, this also meant that the powerful positions held by large industries went unquestioned, along-side which efforts towards democratisation stalled.

For those in the anti-communist camp, this embrace of economic plan-ning by liberal regimes forced a change of rhetoric. As an example, in 1955, at a meeting in Milan of the Congress of Cultural Freedom—the main vehicle for anti-communist and progressive intellectuals—Michael Polanyi declared that the opposition between the capitalist West and communist East was not a conflict between free markets and planned economies.[26] In 1947, Polanyi had been part of the first meetings of the *Mont Pelerin Society*, founded, amongst others, by Friedrich Hayek and Milton Freedman, and often con-sidered by historians to be a critical moment in the founding of the modern neoliberalist movement.[27] In Milan, however, Polanyi denounced Hayek's thesis that an increase in planning would inevitably lead to a totalitarian regime.[28] Instead, he suggested, the difference between East and West was a cultural one. The Soviet Union was lacking a culture of *civility* in which the independent critical thinking citizen was the core of political conduct.

The meeting of the Congress of Cultural Freedom in Milan first popu-

---

24 Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (London: Verso, 2013), chap. 3.

25 Jan Tinbergen, "Do Communist and Free Economies Show a Converging Pat-tern?," *Soviet Studies* 12, no. 4 (April 1961): 333–41; Ragnar Frisch, "Preface to the Oslo Channel Model: A Survey of Types of Economic Forecasting," in *Economic Planning Studies: A Collection of Essays*, vol. 8, International Studies in Economics and Econometrics (Dordrecht: D. Reidel Publishing Company, 1962), 255.

26 Michael Polanyi, "On Liberalism and Liberty," *Encounter*, no. 4 (March 1955): 29–34.

27 See: Philip Mirowski and Dieter Plehwe, eds., *The Road from Mont Pelerin: The Making of the Neoliberal Thought Collective* (Cambridge, MA: Harvard University Press, 2009).

28 As expressed in: Friedrich August von Hayek, *Road to Serfdom* (London: Rout-ledge, 1944); see also: Gils Scott-Smith, "The Congress for Cultural Freedom, the End of Ideology and the 1955 Milan Conference: 'Defining the Parameters of Dis-course,'" *Journal of Contemporary History* 37, no. 3 (July 2002): 437–55, https://doi.org/10.1177/00220094020370030601.

larised the phrase "the end of ideology".[29] By foregoing their opposition to economic planning, liberals had removed the main ideological opposition between themselves and the socialists. Now all political sides could embrace "planning for freedom". The progressive liberals were not alone in their talk of the end of ideology. Even for more critical scholars, the foregoing of the opposition between social democracy and liberalism meant the removal of political strife and a more compliant political culture—in essence a turn towards conservatism. In response to the Milan conference, the intellectual historian H. Stuart Hughes wrote that the removal of ideological opposition led to

> the triumph of the political concepts associated with force and irrational sentiment, the necessarily elite organization of society, and the basically illusory character of social reform—and with it the discrediting of politics as reason in action, the virtue of majorities, and progress as a social faith.[30]

With no ideology, only "the power elite" (as C. Wright Mills called it) remained in situ, effectively removing any vision of a better society from politics.[31] Similarly, Adorno and Horkheimer declared that the domination of the rule-bound bureaucratic system meant the disenchantment—a notion they took from Weber (see previous chapter)—of all politics.[32] Whilst the enchanted distortion of ideology may have disappeared, what remained was the transparency of cold rational power politics and bureaucracies. They saw the end of ideology in the post-war era as a confirmation of their famous *dialectic of Enlightenment* thesis, in which the rationality of Enlightenment reverted to its counter-argument: irrationality.

Notwithstanding Polanyi's cultural distinction, the disappearance of ideology implied that capitalism and socialism were not wholly opposed to each other, and several planners such as Bertrand de Jouvenel, Tinbergen,

---

29 Karl Mannheim, *Freedom, Power and Democratic Planning* (London: Routledge & Kegan Paul, 1951).

30 H. Stuart Hughes, "The End of Political Ideology," *Measure* 2, no. Spring (1951): 155; cited in: Brick, "The End of Ideology Thesis," 95.

31 C. Wright Mills, *The Power Elite* (Oxford, UK: Oxford University Press, 1956); See also: Dorothy Ross, "Whatever Happened to the Social in American Social Thought? Part Two," *Modern Intellectual History* First view (2021): 8–9, https://doi.org/10.1017/S1479244320000530.

32 Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment*, ed. Guzelin Schmid Noerr, trans. Edmund Jephcott (Palo Alto: Stanford University Press, 2002), 27.

and Frisch preach an optimistic view that the two systems would ultimately converge.[33] In that sense, the post-war concept of ideology also facilitated the dissolution of the distinction between East and West. Ideology was a ghostly concept, only appearing in its negative sense. It was not, Mannheim thought, that society had lost its appetite for what ideology offered—namely, identity and justification—but rather that ideology no longer provided any stable identity or justification. Ideology established and undermined the distinction of liberal democracy and totalitarianism. Free of ideology, democracy could make pragmatic choices, yet fell prey to the power elite. Ideology had once given meaning to political action by guiding the way for a future society. However, such a directional historical outlook had faltered, becoming more akin to a blackhole sucking up all visions of the future. It made historians and philosophers question whether politics should really be guided by visions of the future at all.

## 3.2 Secular Progress

In the aftermath of the Second World War, a remarkable number of largely German-speaking Jewish emigres started to trace the roots of totalitarianism back to historicism as the underlying mentality of modern historicity. Karl Popper's *The Open Society and Its Enemies* (1945), Karl Löwith's *Meaning in History* (1949), Strauss' *Natural Right and History* (1953), Reinhart Koselleck's *Critique and Crisis* (1954), and Arendt's *Between Past and Future* (1954) all saw the roots for totalitarian ideology in the idea of progress so central to the conception of historicity developed in the wake of the French Revolution.[34] To them, progress was used by intellectuals to justify the horrors of totalitarian ideology. They argued that if politicians claimed to act upon the determined course of history, the blood spilt in establishing a new society was merely a necessary evil, soon forgotten as modernity marches ever forward.

Rather than taking these accounts as a specific expression of the hor-

---

33 See: op. cit. n. 25.

34 Other examples that made similar analyses are: Jacob Talmon, *The Origins of Totalitarian Democracy* (London: Secker & Warburg, 1952); Raymond Aron, *Introduction to the Philosophy of History: An Essay on the Limits of Historical Objectivity* (Boston, MA: Beacon Press, 1961); Horkheimer and Adorno, *Dialectic of Enlightenment*; Jacob Taubes, *Occidental Eschatology*, trans. David Ratmoko (Stanford, CA: Stanford University Press, 2009).

rifying actions of the Nazi regime, this section will analyse two of these ac-
counts in the light of debates on ideology that occurred after the war.[35] The
notion of progress underwent a similar transformation to that of ideology: It
became all-encompassing, all-consuming, governing the conceptual systems
of liberalism, fascism, and socialism, yet simultaneously it seemed absent
and without any discernible identity. As I will show in the next section, this
shifting notion of progress alters the conceptualisation of historicity consid-
erably. Since, as argued in the previous chapter, the idea of economic plan-
ning was founded upon an inevitable yet ultimately beneficial modernity,
the problematised notion of progress posed considerable issues for the ideal
of planning.

      The theoretical groundwork for the post-war critique on histori-
cism and progress was partly informed by discussions on the crisis of histor-
icism, which I briefly outlined in the first two chapters. Furthermore, these
critiques intersected with a fierce debate on the nature of secularisation and
modernity in German philosophy that took shape in the 1950s and 1960s.
This debate revolved around the question of whether secularisation meant
the disappearance of religious notions from politics, or rather a transfor-
mation of religious notions into the concepts of modern politics and, if so,
whether modern society should recognise its substantial roots in religious
traditions, or instead force a break.[36]

    In *Meaning in History* (1949), Löwith argued that modern history was
a secularised form of a Judeo-Christian conception of salvation and time,
and that modern society was unable to decide how to deal with this inheri-
tance.[37] Koselleck's and Jörn Rüsen's insight that history starts with a loss of
meaning in the present (as explained in the first chapter) can be traced back

---

35  For an analyses that does link these accounts to the Jewish emigre background
of most of these authors, see: David N. Myers, *Resisting History: Historicism and Its
Discontents in German-Jewish Thought* (Princeton, NJ: Princeton University Press,
2010); Liisi Keedus, *The Crisis of German Historicism: The Early Political Thought
of Hannah Arendt and Leo Strauss* (Cambridge, UK: Cambridge University Press,
2019).

36  An early proponent of this theory was Carl Schmitt, who argued that all mod-
ern political concepts were secularised religious concepts. The state for him was the
continuation of the old divine authority of the church complete with its symbolic
order governing the norms in society. Carl Schmitt, *Political Theology: Four Chapters
on the Concept of Sovereignty*, trans. George Schwab (Cambridge, MA: MIT Press,
1985), chap. 3. It was later picked up by Löwith and Hans Blumenberg, starting
the so-called "secularisation debate." See: Sjoerd Griffioen, "Contested Modernity:
Karl Löwith, Hans Blumenberg and Carl Schmitt and the German Secularization
Debate", PhD-Thesis (University of Groningen, 2020).

37  Löwith, *Meaning in History*, 5.

to this book and, for Löwith, was primary evidence of this religious legacy in modern history.[38] He argued that for the Ancient Greek and Roman historiographers, the purpose of history had been remembrance. Herodotus recorded the things that had happened "in order that the memory of the past may not be blotted out from among men by time" and "that great deeds may not lack renown."[39] As François Hartog puts it, history for the Greeks was "an economy of *kleos*" (renown): an economy of the fallen on the battlefield, of those who were forgotten and those who were remembered for their glorious deeds.[40] Similarly, for Thucydides, the past was to be remembered in the hope "that future generations and individuals will act more intelligently in certain circumstances."[41] Yet for both Herodotus and Thucydides, the past was meaningful because historical time was bound to natural recurrences. Kleos was a sensible purpose in reference to *nemesis*, as nature sought retributions for excesses, returning to a natural equilibrium. Similarly, the past was instructive insofar that similar situations as those of the past would happen again in the future.

In the Judeo-Christian tradition, however, history gains a completely different meaning—in this context, via human suffering and salvation. As mankind struggles to make sense of its suffering, so the causes, cycles, laws, and nature of history feel all the more meaningless. Yet at the same time, suffering can only feel like a loss of meaning when one assumes that the causes of history are there, but remain ultimately hidden. As Löwith wrote:

> [I]t is only within a pre-established horizon of ultimate meaning, however hidden it may be, that actual history seems to be meaningless. […] To ask earnestly the question of the ultimate meaning of history takes one's breath away; it transports us into a vacuum which only hope and faith can fill.[42]

Therefore, history "is meaningful only by indicating some transcendent purpose beyond the actual facts."[43] History had to have a *telos*—a goal—in order

---

38 The influence of Löwith on Koselleck is well-documented. See: Niklas Olsen, *History in the Plural: An Introduction to the Work of Reinhart Koselleck* (New York: Berghahn Books, 2012), 21–23.

39 Löwith, *Meaning in History*, 6.

40 François Hartog, *Regimes of Historicity: Presentism and Experiences of Time* (New York: Columbia University Press, 2015), 55.

41 Löwith, *Meaning in History*, 7.

42 Löwith, 4.

43 Löwith, 5.

to be experienced as meaningful, even if that goal were hidden. In the Christian conception, such and end was portrayed in the idea of the end of times: the *eschaton*.

Löwith claimed that for Saint Augustin, secular history, with its recurrent structure of generations (the Latin *saeculum* can mean age, lifespan, and generation), and the eschaton were clearly separated. Yet neither the meaning of human suffering, nor the greatness of human deeds are to be found in secular time; it is only the second coming of Christ that provides hope that the recurrence of endless misery would one day be over.[44] In the late Middle Ages, the theologian Joachim of Fiore turned this spiritual anticipation into a worldly expectation of providence in secular time, thus undermining Augustine's distinction between the two times.[45] Löwith directly linked expectations of the Kingdom of God, what the Joachites called the third dispensation, in the secular realm to the expectations of socialists and National Socialist of a classless society or an empire of the pure race: "The third dispensation of the Joachites reappeared as a third International and a third Reich, inaugurated by a dux or a Führer who was acclaimed as a saviour and greeted by millions with Heil!"[46]

This expectation of salvation in the earthly realm brought forth a problem for modern historiography. Historicism had foregone any metaphysical foundations of historiography and therefore any link to transcendent laws, purpose, or meaning of history.[47] However, the religious promise of salvation kept on haunting modern historiography. Historical providence was still to be expected, but now in the realm of politics by improving society. In other words, history became meaningful in reference to progress. This, however, raised an issue, namely that transcendental foundations were impossible if historiography wanted to be scientific, yet the idea of progress seemed to imply that historical development answered to a certain hidden logic or law.[48] This problem was reminiscent of the crisis that befell the historicism debates of the 1920s. History in this sense was either too relativistic, foregoing any reference to any laws, or too totalising by reducing every event to the devel-

---

44 Löwith, 168.

45 Löwith, 145.

46 Löwith, 159.

47 More recently, scholars have pointed out that, in fact, there was a metaphysics underlying the historicism of Leopold von Ranke. See: Frederick C. Beiser, *The German Historicist Tradition* (Oxford, UK: Oxford University Press, 2011), chap. 6.

48 Löwith, *Meaning in History*, 81; Julian Joseph Potter, "Meaning in Eternity: Karl Löwith's Critique of Hope and Hubris," *Thesis Eleven* 110, no. 1 (June 1, 2012): 27–45, https://doi.org/10.1177/0725513612450146.

opment of history. After the Second World War, this problem gained a new dimension. For Löwith, the secularisation of time was a problem modernity was unable to overcome. Progress assumed a higher, albeit hidden telos—all-encompassing yet simultaneously absent. This was the very same duality of the concept of ideology that appeared in the writings of Mannheim.

The duality of progress and its political consequences was clarified in the writings of Arendt. In her essay *The Concept of History* (1958), she analysed the secularisation of history as a result of the dual processes of modern science and the privatisation of religion and ethics. In a sweeping big narrative of history, Arendt asserted that the ancient Romans and Christian Middle Ages had understood that ethics could only be cultivated in a just community. The building and cultivation of such a community was what gave this ideal of public virtue a certain essence, or permanence. For the later Christian, such permeance was bound to the idea of an afterlife in which true permanence could exist.[49] Public virtue was thus governed by permanence, not progress. However, once Protestant teachings had begun to undermine the idea that earthly deeds would lead to salvation in the afterlife, humankind in the modern age, with the help of modern science, transposed the idea of ethics to the realm of a means-end rationality.[50] The virtue of an action became dependent on how effectively it could achieve political ends in the here and now. Such an utilitarian view, however, lacked an ultimate goal: These were only improvements for improvements sake; they did not contain an essence or permeance. Indeed, the complete opposite was the case: It only served to emphasise that everything was constantly changing, and that the present was simply a fleeting moment. With no essence, no meaning for political actions for the ethical realm of daily life remained. Into this vacuum stepped the idea of progress. As Arendt wrote: "[T]he modern concept of history proved to be [useful] in giving the secular political realm a meaning which it otherwise seemed to be devoid of."[51] History was a form of political sense-making in so far as political actors could understand themselves as acting in accordance with the development of history. Liberals and socialists alike gave their utilitarian programmes an ultimate meaning by presenting themselves as the logical next step in history.

Yet radicalised notions of modern history, as could be found in both German historicism and its detractors, such as Friedrich Nietzsche, had al-

---

49 Hannah Arendt, "The Concept of History: Ancient and Modern," in *Between Past and Future: Six Exercises in Political Thought* (New York: Viking Press, 1961), 46.
50 Arendt, 54.
51 Arendt, 82–83.

ready turned modernity against itself: No universal course of history was to be found. Instead, history showed the relativity of the ethics and political programmes of each period and event:[52]

> It is, […] in the nature of the very image in which history is usually conceived, as process or stream or development, that everything comprehended by it can change into anything else, that distinctions become meaningless because they become obsolete, submerged, as it were, by the historical stream, the moment they have appeared.[53]

Arendt, as did Löwith, thought that modern history could not escape its duality—between science and transcendent telos. Whilst progress did not provide the political realm with an ultimate purpose, it did, however, subsume all human actions and historical events to one singular totalising idea of progress. Each period and each event was unique, yet all were subject to the variance of historical change; progress only guaranteed that nothing ever remained the same. This yielded a meaninglessness, not only in relation to the realm of ethics and politics, but also, as everything was part of the *whole* of historical progress, of all distinctions between human action, whether good or bad. The meaninglessness of distinctions was for Arendt the ultimate danger. For her, it was a typical expression of totalitarianism: With no distinction between actions, consequences, ethics, or politics, only maximum *effect* remained.[54] In her *Origins of Totalitarianism* (1951), she characterised totalitarian political systems by their attempt to remake society in their ultimate image and the manner in which everything that stood in their way had to be eliminated. Not even the efficiency of utilitarianism mattered anymore, only the vision of the leader and the ideology to completely remake society.[55]

In boundless, all-encompassing progress, whether in the liberal democracies or totalitarian systems, mankind was trapped between a past and a future that stretched into infinity. In a parable borrowed from Franz Kafka, Arendt imagined mankind being propelled forwards by the past into the future in order to overcome its obstacles. Yet the future pushed back, only showing the same variance the past had already shown. Humankind was thus pushing

---

52 See also: Charles R. Bambach, *Heidegger, Dilthey, and the Crisis of Historicism* (Ithaca: Cornell University Press, 1995).

53 Hannah Arendt, "What Is Authority?," in *Between Past and Future: Six Exercises in Political Thought* (New York: Viking Press, 1961), 101.

54 Arendt, "The Concept of History," 87–88.

55 Hannah Arendt, *The Origins of Totalitarianism* (New York: Schocken Books, 1951), 6.

in obscurity against the future, not knowing to what extent their efforts in the past and of the future were alike. What Arendt was looking for was a gap between past and future; a space in which progress could be halted for a moment and the meaning of the past and purpose of the future considered.[56] In modern historicity, there seemed no space for such consideration.

Although Arendt's critique of historicism echoes the debates on the crisis of historicism of the interwar years and her analysis of totalitarianism was inspired by her very direct experience of the Nazi regime, her critique of modern history as fundamentally totalitarian in nature also reflected the wider discussion on ideology and planning that took place after the war. She associated the rise of the social sciences with the utilitarian outlook in which every object, society, or physical nature was ripe for improvement. The behavioural sciences, which became so dominant in US social science whilst Arendt was writing her critique (which I will address in section 3.4), was merely the latest, albeit most pronounced example in which politics was transposed from the realms of action and work to the realm labour, meaning that political action could only be understood by working through a predetermined design or plan.[57] This critique hit at the core of ideology as a set of principles that dictated political action and the idea of economic policy working in accordance with an economic plan—two hallmarks of Cold War politics. Moreover, appealing to the totalising idea of progress, the distinction between liberalism and socialism became ever more meaningless for Arendt. Both ideologies became part of one large ideology of planning and utilitarian politics.[58]

What Arendt was searching for instead of politics as labour (politics bound to predetermined plan), was a space in which humans could discuss their politics in an open manner without an overarching design. Only in such a space could humans once again be the author of their own story: what the past meant for them outside of the variance of historical development, and what the future could be beyond the totalising horizon of progress. Authorship—being able to make something without design—was for Arendt part of the realm of work; a realm in which art, technique, and politics could be combined. The missing gap between past and future had to be precisely where such a space for authorship could be established. In that sense, Arendt sought to escape modern historicity. Likewise, Löwith emphasised cosmolo-

---

56 Hannah Arendt, "Preface: The Gap between Past and Future," in *Between Past and Future: Six Exercises in Political Thought* (New York: Viking Press, 1961), 7.
57 Arendt, *The Human Condition*, 191.
58 Arendt, "What Is Authority?" 102.

gy and the idea of the recurrence of nature as a way out of modern historicity that could provide a new historical realm in which the wounds of the past could be healed.[59]

## 3.3. Utopia and Community

Part of the birth of modern historicity for Arendt was the waning of a community which, in reciprocity with public virtue, could gain a form of permanence; the gap between past and future in which free citizens could discuss politics without reference to a higher telos—the place where such a community could be established anew. The rise and fall of ideology was ultimately bound up with the development from a community-oriented society to an individual-oriented society. This lament of the waning of a political community reflected a development in US post-war sciences in which, as historian Dorothy Ross puts it, *the social* disappeared from social thought.[60] Like Arendt's critique, this disappearance was triggered by Cold War fears expressed in the debates surrounding ideology and progress. The social here was perceived as a dangerous force for a potentially totalitarian culture, whilst with the waning of ideology, there seemed no group identity possible that made the social into a sensible category. As I will argue in this section, this development made the appeal to community and traditional values, which were so central to interwar planning, obsolete. As an alternative, the idea of the utopia garnered renewed interest for progressive intellectuals and social scientists alike.

The disappearance of the social had the same cause, paradoxically, as that which had led US scholars to start researching social bonds and forces in the interwar years, namely, the fear of alienation in modern society.[61] As discussed in the previous chapter, interwar scholars had argued that modernity had alienated individuals from their traditional communities through the rise of rule-bound rationality. This argumentation took a surprising twist after the war. The individual was still alienated, but this time by the social

---

59 Zachary Riebeling, "Trauma Delegitimized: Karl Löwith and the Cosmic View of History," *History and Theory* 60, no. 1 (2021): 23–49, https://doi.org/10.1111/hith.12191.

60 Dorothy Ross, "Whatever Happened to the Social in American Social Thought? An Answer in Two Parts," *Modern Intellectual History* First view (2021), https://doi.org/10.1017/S1479244320000529.

61 Ross, 10–13.

forces of the community; the alienated individual was to be saved, not by the community, but rather by a rulebound rationality—a complete reversal of the original interwar argument.[62] The driving force behind this argument, according to Ross, was a renewed fear of mass society: The dangers of totalitarianism were now firmly located in the loss of individuality of mass political rallies and the individual's predisposition to follow authoritarian commands.[63] Powerful civil organisations, such as unions, political parties, sport clubs, and mass protests now became breeding grounds for this loss of individuality and the uncritical following of leaders. In contrast, consumer culture was seen as a safer way to channel the herd-instinct of the human being—one, moreover, that could foster an individual attitude.[64]

In response, social science started to theorise social behaviour as the aggregate of individual choices. This was partly a normative ideal: If individuals would use the rule-bound rationality that the models of the social scientists prescribed, they would be less likely to fall prey to totalitarian ideology.[65] It was also a reaction to the fears of an ideological and bureaucratic state. The focus of social research shifted away from the state to the democratic system as a more decentralised way to think about society. What the state did, was an outcome of competing interest groups—an aggregate of the choices of different social groups, who in turn were the aggregate of individual choices, like those of the individual cast ballots of a general election.[66] Mills' problem regarding the power elite was partly neutralised by shifting the focus away from them. It also brought attention to those social forces that had previously been deemed suspicious, such as the mass media and consumer culture, now as channels of individual choice. In contrast, in the interwar years, the journalist and political theorist Walter Lippmann had warned about the elusiveness of public opinion as constituted by mass media such as radio. After the war, public opinion was the main vehicle of democratic politics.[67] The

62 Ross, "The Social, Part II," 6.

63 See also: Danielle Judith Zola Carr, "'Ghastly Marionettes' and the Political Metaphysics of Cognitive Liberalism: Anti-Behaviourism, Language, and the Origins of Totalitarianism," *History of the Human Sciences* 33, no. 1 (2020): 147–48, https://doi.org/10.1177/0952695119874009.

64 Ross, "The Social, Part II," 15.

65 Hunter Heyck, "Producing Reason," in *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature* (New York: Palgrave Macmillan, 2012), 99–116.

66 David Ciepley, *Liberalism in the Shadow of Totalitarianism* (Cambridge, MA: Harvard University Press, 2006), 183–228.

67 J.A.W. Gunn, "'Public Opinion' in Modem Political Science," in *Political Science in History: Research Programs and Political Traditions*, ed. James Farr, John S. Dryzek,

danger of totalitarian ideology was thus defused by the focus on systems, subsequently adding to the image of a post-ideological age.

Yet Arendt was not the only one who lamented this waning of community in favour of a political model consisting of individual choice. In *After Utopia* (1957), Judith Shklar came to a similar conclusion. She argued that liberalism born in the Enlightenment period, had originally revolved around the image of a unified society of free individuals. Free deliberation only made sense in this original liberalism in relation to a community, the political actions of which were of their own making. Self-determination was that of the community, not of individual actions. In the romantic period, however, society was no longer the place of free individuals, but instead the stranglehold of social norms that robbed individuals of their freedom. Freedom and society thus fell into opposition.[68] Although Shklar presented her analysis as a historical account, it better reflects the fear of the Cold War than the historical period of romanticism.

The splitting of individuals and society into two opposing entities had detrimental effects on the political programme of liberalism, not least in so much as it removed any radicalism from politics. Liberals no longer wished for the radical improvement of society, since such an improved society would only have stronger social forces at its disposal via which to coerce individuals. As she wrote:

> What has happened is not only that the Enlightenment has no heirs but that radicalism in general has gone totally out of fashion. Radicalism is not the readiness to indulge in revolutionary violence; it is the belief that people can control and improve themselves and, collectively, their social environment. Without this minimum of Utopian faith no radicalism is meaningful. At present, however, even those who regard themselves as adherents of the 'spirit of 1789' seem to lack it.[69]

With the radicalism of liberalism gone, only progress as an outlook for the future remained. Just as with Arendt's analysis, this progress was an empty one. It became solely the ongoing march of history without the possibility

---

and Robert J. Leonard (Cambridge, UK: Cambridge University Press, 1995), 109–22.
68  Samuel Moyn, "Chapter 1. Before–and Beyond–the Liberalism of Fear," in *Between Utopia and Realism The Political Thought of Judith N. Shklar*, ed. Samantha Ashenden and Andreas Hess (University of Pennsylvania Press, 2019), 24–46.
69  Judith Shklar, *After Utopia: The Decline of Political Faith* (Princeton, NJ: Princeton University Press, 1957), 219.

of humankind steering modernity for the betterment of itself.[70] The agent of modernity, as the social-committed scientists of the interwar years had conceived of themselves, had disappeared. On this very point, Shklar observes: "[P]rogress was impersonal, the inevitable course of supra-personal development, and human choice was limited to getting on or off the historical bandwagon. It was not men who made history, but history that propelled man."[71] In her view, socialism was not doing any better: "[V]ery few were able to abandon the tactical advantage of claiming that they were also in tune with the march of 'history' or, rather, the inevitable course of economic and technological development."[72] By appealing to the same empty progress, socialism was similarly caught in a modernity without an agent.

In Shklar's analysis, the abandonment of radical politics meant that no utopian thought about the improvement of society was attainable. In an article from 1965, entitled "The Political Theory of Utopia", Shklar linked her insights on utopia to Mannheim's *Ideology and Utopia*, discussed earlier. For Mannheim, utopia was the counter-concept to ideology, likewise focussed on the improvement of society. However, unlike ideology, utopia was not bound to the ruling classes. Rather, it was an expression of all classes of society through art, culture, and philosophy that challenged the ideology of the status quo that declared that no improvement was possible. Yet, Mannheim believed that a classless society was imminent and, as such, little reason for utopias remained. Mannheim wrote:

> [W]e would be faced then with the greatest paradox imaginable, namely that man, who has achieved the highest degree of rational mastery of existence, left without ideals, becomes a mere creature of impulses. [...] man would lose his will to shape history and therewith his ability to understand it.[73]

Whilst Shklar agreed with Mannheim's conclusion, she contested his analyses. Shklar argued that all early modern utopias had always imagined a unity of the ideal society, like those Enlightenment thinkers had still done. However, with the advent of romanticism, the unity of society became a dystopia rather than a utopia. This development was also linked to the emergence of the modern form of historicity. Utopias traditionally had no history; in the

---

70 Shklar, 113.
71 Shklar, 220.
72 Shklar, 220.
73 Mannheim, *Ideology and Utopia*, 176–77.

Enlightenment, they were the so-called "noble savage" societies—the opposite of civilised society. Yet with the idea that progress changed society in radical ways and that all societies, even the savage ones, had a history, the idea of an original unity of society was discredited. The historisation of utopia—imagining utopia not as another place on earth, as Thomas More had done, but as a future society—meant the end of the radical potential of utopia.[74] With the waning of utopia in political thought, ideology as a retarded substitute had arisen in the modern era.[75] Ideology still applied the concepts that utopian thought had once generated, but without the proper context— that is, the closed off unified society—it could only falsely represent political realities.

Shklar was pessimistic about the ability of politics to find a believable vision of a better future. The end of ideology did not mean the return of utopia. It only left "political theory without any clear orientation and so with a sense of uneasiness."[76] Such sentiment was not uncommon amongst US scholars in the 1950s. In *The End of Ideology* (1960), the book that solidified the catchphrase of the post-ideological age, Daniel Bell similarly lamented the disappearance of radical politics. Unlike Shklar, he deemed the longing for utopia in the absence of radicalism not as a melancholy or nostalgic longing for an unattainable fantasy, but as a quest to regain what had been lost. Bell wrote: "The end of ideology is not—should not be—the end of utopia as well. If anything, one can begin anew the discussion of utopia only by being aware of the trap of ideology."[77] Although Bell admitted that the idea of the 'stages of history' was discredited and large-scale economic advancement seemed out of the question, history was not yet over. Society was still unformed in the coming tides of mass culture and the emerging welfare state. Even if the largest ideological differences disappeared, many fundamental question remained: "[H]ow to guard against bureaucratisation, what ones means by democratic planning or workers control—any of these question require hard thought."[78] Moving away from the old conception of progress, Bell argued that with the introduction of new planning tools such as operation research and system analysis (on which more in the next section), "so-

---

74  Judith Shklar, "The Political Theory of Utopia: From Melancholy to Nostalgia," *Daedalus* 94, no. 2 (1965): 368.

75  Koselleck

76  Shklar, "The Political Theory of Utopia," 379.

77  Daniel Bell, *The End of Ideology: On the Exhaustion of Political Ideas in the Fifties* (New York: Free Press, 1960), 405.

78  Bell, 405.

cial time" could be conceived differently. History was not moving towards a hidden telos, nor was everything subject to endless variance. Instead, political action in relation to the future had to be seen as a type of pragmatism. Like the Machiavellian prince, the government had to seize new opportunities that would emerge in the future out of the jumble of historical developments. Planning was the bedrock of such a new social time, as it allowed governments to grasp the opportunities of the future over the long term, slowly but surely moulding society into a more perfect form.[79]

Remarkably enough, Bell's conception of utopia is quite close to that of Shklar. Like Shklar, it appeals to free citizens as part of a single social unity. This social unity was the democratic system on and by which the choices of individuals could actually work towards a better society. Freed from historicism, planning inaugurated a new social time in which utopias were once again possible. As will become clear in the next section, social scientists, like Bell, based their new planning projects on rule-bound rationality. This meant, however, a larger shift in the concepts used to discuss democratic politics. Political action was not aimed at the improvement of society, but rather to work towards a political system in which a more stable patterns could be created. Democratic systems could be improved because they were working towards attaining dynamic equilibrium—a stable state in which the turmoil of democratic politics was still possible. The metaphors of systems, feedback loops, and equilibrium were all derived from computer programming. Consequently, the utopia social scientists sought was a cyborg utopia.

## 3.4 Cold War Rationality and Instrumental Expertise

Cold War rationality and computer programming introduced a whole new set of metaphors and concepts that could address the issues facing post-war democracies in relation to the future. Shklar had argued that the notions of politics derived from the ancient authors still exerted their influence on political discourse, but that the context of these concepts had ceased to be relevant in the modern post-utopian age. The invention of whole new registers of political vocabulary after the war seems no coincidence; there was a sense that the old political concepts were terribly outdated.

---

79 Daniel Bell, "Twelve Modes of Prediction: A Preliminary Sorting of Approaches in the Social Sciences," *Daedalus* 93, no. 3 (1964): 845–80; Jenny Andersson, *The Future of the World, Futurology, Futurists, and the Struggle for the Post-Cold War Imagination* (Oxford: Oxford University Press, 2018), 55–57.

Specifically in relation to this fading relevance, Shklar wrote:

> It is not that political theory is dead, as has often been claimed, but that
> so much of it consists of an incantation of clichés which seem to have
> no relation to social experiences whose character is more sensed than
> expressed.[80]

The computer system metaphors of Cold War rationality were a response to
the dangers of totalitarian progress after the war. At the same time—and to
which the writings of Arendt attest—the post-ideological and totalitarian is-
sues of post-war politics were thought of as partly a product of Cold War be-
havioural sciences and planning programmes. There is, in this case, no easy
cause and effect relationship. Rather, the new imagery of politics coevolved
with the spectre of meaningless progress and totalitarian systems. As I will
show in this section, this imaginary allowed social scientist to comprehend
the political situation—in terms of planning, consensus, and consumer cul-
ture—in which they found themselves, but also to formulate solutions and
even to imagine utopias anew that could guide this new form of politics.

The Second World War marks a clearly defined break in the epistemol-
ogy and discipline formation of the social sciences. The roots of this trans-
formation are often located in the mobilisation of social scientists in the war
effort, even if some developments, such as the turn towards the increasing
use of mathematics in economics, had already begun before the war.[81] Work-
ing on the mobilisation of military personnel and vehicles, and coordinating
supply chains, the military effort made by the United States in the Second
World War provided a fertile ground upon which scientists could exchange
the tools and theories from a variety of different disciplines. Peter Galison
refers to this as a "trading zone" in which the usual disciplinary boundaries
mattered less, allowing scientific entities to travel between disciplines.[82]

The theoretical and technical innovations that came out of this ex-
change shared a common mathematical form and a focus on coordination.
They were tools for (the coordination of) action, intended to intervene in
social processes and mobilise actors. This action-orientedness was carried

---

80  Shklar, "The Political Theory of Utopia," 379.
81  E. Roy Weintraub, *How Economics Became a Mathematical Science* (Durham, NC:
Duke University Press, 2002).
82  Peter Galison, "Computer Simulations and the Trading Zone," in *The Disunity
of Science: Boundaries, Contexts, and Power.*, ed. Peter Galison and David J. Stump
(Stanford, CA: Stanford University Press, 1996), 118–57.

over after the war, when the US government invested heavily in the social sciences by sponsoring military think tanks that acted as cross-disciplinary hubs, giving scientist copious amounts of freedom and the funds to pursue military-related research topics. The US government had hoped that these think tanks—such as the Office for Naval Research, the army's Office of Research and Development, and project RAND (later the RAND Corporation)—would, in time, produce viable military tools that could be used in the burgeoning conflict with the Soviet Union.[83] The development of these instruments often bears the markings of their initial purpose as military tools: Game theory described the strategies between competing nuclear powers; systems theory could direct complex missile systems; whilst in cybernetics, agents were constantly anticipating the strategic manoeuvres of the enemy; and operation research optimised the flight patterns of the Berlin Airlift.[84]

However, the tools and theories produced grew beyond their military purpose as they were disseminated across a variety of disciplines, from psychology to biology, and from economics to sociology. Eventually these new innovations gave rise to behaviourism, cognitive science, systems theory, modernisation theory, the biases and heuristics programme, and many more. They retained, however, three vital aspects from their military think tank incubation: first, their action-oriented tool-like forms;[85] second, their programming orientation, imagining social processes as information currents in computer circuits;[86] and third, their description of human behaviour as competing military forces. According to this description, humans were suspicious, constantly looking for strategies that could give them an advantage when competing against others. This latter aspect, historians contend, resonated well with the general cultural milieu or mindset of the average citizen during the Cold War, when the so-called "Red Scare" mood incited a profound sense of paranoia.[87]

---

83 Joel Isaac, "The Human Sciences in Cold War America," *The Historical Journal* 50, no. 3 (2007): 736, https://doi.org/10.1017/S0018246X07006334.

84 Philip Mirowski, "When Games Grow Deadly Serious: The Military Influence on the Evolution of Game Theory," *History of Political Economy* 23, no. S1 (1991), https://doi.org/10.1215/00182702-23.S1.227; Galison, "The Ontology of the Enemy"; Erickson et al., *How Reason Almost Lost Its Mind*, chap. 3.

85 Isaac, "Tool Shock."

86 Bernard Dionysius Geoghegan, "The Historiographic Conceptualization of Information: A Critical Survey," *IEEE Annals of the History of Computing* 30, no. 1 (March 2008): 66–81.

87 For example: George Reisch, "The Paranoid Style in American History of Science," *Theoria : An International Journal for Theory, History and Fundations of Science* 27, no. 3 (2012): 323–42, https://doi.org/10.1387/theoria.6273.

The computer was the driving force behind the social sciences in their development within the military think tanks. As described in the previous chapter, from the beginning of the twentieth century onwards, the rules governing society had been imagined as mechanical rules. Consequently, rationality was understood as the application of these mechanical rules. The rise of the computer further added to this imagination. In rational choice theory, often taken as the hallmark of Cold War science, human agents were imagined as small computers, applying a formal set of rules and uncertainty assessments in order to optimise their behaviour in satisfying their preferences.[88] Human behaviour, understood via the idealisation of rational choice theory, therefore became perfectly predictable in the computer models.

The negative connotation interwar scholars had previously attached to this image of human rationality apparently disappeared. Instead, computer rationality was imagined as protecting human actors against rash and ill-considered actions—a pertinent danger with the increasingly destructive power of the nuclear arsenal. As argued above, the normative ideal of these rational tools were also aimed at the dangers of totalitarian ideology. The opposite of mechanical rationality automatically became irrationality, a potential ill of society in which humans, through ideological pressure, would act on false presumptions. Psychologists started to study the myriad forms self-deception could take, launching theories such as *cognitive dissonance* and *groupthink*.[89] Individual rule-bound rationality was thus the antidote to the dangers of mass society.

The US government's funding of science in service of the growing "military-industrial complex" was not confined to the human sciences alone. Under the premise that fundamental research would drive technological innovation, famously expressed in Vannevar Bush's *Science, the Endless Frontier* (1945), the US government poured large amounts of money into physics, especially nuclear research, in the hope that these would yield new military equipment. Historians of science have dissected the entanglement of postwar science and government as forming a new ideology in which scientists took a more neutral guise, undoing their interwar social commitments, thus acquitting themselves of any accusation of being political actors in a military

---

88 Beatrice Cherrier and Jean-Baptiste Fleury, "Economists' Interest in Collective Decision after World War II: A History," *Public Choice* 172, no. 1–2 (2017): 23–44, https://doi.org/10.1007/s11127-017-0410-7.

89 Heyck, "Producing Reason"; Erickson et al., *How Reason Almost Lost Its Mind*, 104–6.

machine.[90] Science became part of state-power, and the scientist an agent of the state. Science contributed not only to the state's increasing grip on society in the form of social policy programmes and homeland security, but also to its dominance overseas through modernisation theory and CIA-led operations.[91] Social engineers clung to positive methodologies to extend the experimental, controlling, and intervening practices of the natural sciences to society.

The flipside of this positivistic persona of the neutral scientist was the image of a cybernetic society in which the social engineer was the *kybernét s*—the helmsman who could steer the information currents in the system-society.[92] It was this image of the planner that was so fiercely attacked by Arendt and other critics of liberalism such as Strauss. In this formulation, the scientist was presented as a technocrat whose only guiding principle was the utilitarian effectiveness their designed policies had on society. Positivistic scientists were cut off from society as their actions were not bound to any public virtue or fostered in any larger community. Their task was to design plans for politics, whilst civil society was left to enact politics on the basis of those plans.[93]

Arendt's work does not contain any empirical study of technocratic power and unsurprisingly, her image of the Cold War scientist did not ring completely true for many social scientists who became scientific advisories to the government. As exemplified by major figures of the US social sciences, such as Talcott Parsons, Herbert Simon, and Paul Samuelson, many government experts presented themselves more like a businessman, selling a tool-based kind of expertise: fixing policy problems where possible, making the lives of policymakers easier—an engineer *cum* social entrepreneur.[94] As Joel

---

90 Jessica Wang, "Scientists and the Problem of the Public in Cold War America, 1945-1960," in *Science and Civil Society*, ed. Lynn K. Nyhart and Thomas Broman, Osiris 17 (Chicago: University Of Chicago Press, 2002), 323–47.

91 Bernstein and Hunter, "The Cold War and Expert Knowledge." See also the essays collected in *Radical History Review* 63, no. 1 (1995).

92 Donna Haraway, "Signs of Dominance: From a Physiology to a Cybernetics of Primate Society, C.R. Carpenter, 1930–1970," in *Studies in History of Biology*, vol. 6 (Baltimore: Johns Hopkins University Press, 1983), 129–219.

93 Arendt, *The Human Condition*, 147; John G. Gunnell, "The Technocratic Image and the Theory of Technocracy," *Technology and Culture* 23, no. 3 (1982): 408–409, https://doi.org/10.2307/3104485.

94 Nils Gilman, *Mandarins of the Future: Modernization Theory in Cold War America* (Baltimore: The Johns Hopkins University Press, 2007), chap. 3; Hunter Crowther-Heyck, *Herbert A. Simon: The Bounds of Reason in Modern America* (Baltimore: Johns Hopkins University Press, 2005); H. Maas, "Making Things Technical:

Isaac describes:

> This hard-nosed, suit-wearing, business-like persona was connected to
> new, technologically refined forms of social science. No longer sage-like
> social philosophers or hardscrabble, number-crunching empiricists, aca-
> demic human scientists portrayed themselves as possessors of tools and
> programs designed for precision social engineering.[95]

The scientists' tools became a product for sale, their workings, the basis of
their authority, and their scholarly persona founded in the ability to operate
the tools effectively. These tools, the experts thought, were not an extension
of the administrative apparatus of the state and were not intended to increase
the power that was already wielded through statistics and laws.[96] Although
the new Cold War instruments were focused on intervention, coordination,
and direction, their aim was not to render society a controlled experiment in
which each relevant variable could be manipulated, as later overstatements
of the "societies of control" implied.[97]

In other words, the image contained in the Cold War instruments of
social science was not one of predictable and controllable computers with
steerable information currents. Rather, it was an image of society as an in-
terconnected web of actors operating independently yet entangled in the ac-
tions of others—a system fundamentally too complex to be either perfectly
programmable, or predictable. State actors and scientific experts were no
different from other actors in society, and thus did not stand atop the system.
Instead, it was the task of scientists to understand their own actions on the
dynamic system of actors. Tools for intervention did not intend to control
the whole of the complex system, but were only one of the individual actors
in a society made up of many. Their power was imparted by performing
interventions into complex systems that, although capable of yielding stable
results, were precisely neither completely known, nor could they be com-

Samuelson at MIT," *History of Political Economy* 46, no. Supplement 1 (January 1,
2014): 272–94, https://doi.org/10.1215/00182702-2716199.

95  Joel Isaac, "Tangled Loops: Theory, History and the Human Sciences in Modern
America," *Modern Intellectual History* 6, no. 2 (2009): 398, https://doi.org/10.1017/
S1479244309002145.

96  See the following examples: Jennifer Light, "Taking Games Seriously," *Technology
and Culture* 49, no. 2 (April 2008): 347–75, https://doi.org/10.1353/tech.0.0007; For
Jay Forrester and system dynamics as a tool: Paul N. Edwards, *The Closed World:
Computers and the Politics of Discourse in Cold War America* (Cambridge, MA: MIT
Press, 1996).

97  Gilles Deleuze, "Postscript on the Societies of Control," *October* 59 (1992): 3–7.

pletely controlled.[98]

As Isaac points out, this tool-based image of expertise is not very different from the way proponents of Actor Network Theory (ANT) describe the impact of science on society.[99] For example, Michel Callon describes the expertise of economists as dependent, not upon their skill in producing accurate descriptions of the economy, but rather in terms of the tools they produce, most prominently the models and the scripts contained within them.[100] In Callon's terms, economic tools provide scripts for actors how to 'enact' the economy. If enough actors make use of the tools, following the same scripts, a stable social pattern can emerge. Callon thus promotes the use of field experiments in economics to form platforms from which new economic practices can emerge. These platforms would function as what is normally called an intervention into "the economy", except that here "the economy" is not an external object that can be acted upon, but rather, the platforms are internal to the system itself.[101] This resemblance between the social engineer and ANT is no coincidence. ANT itself is a fairly recent descendent of cybernetics that builds upon a specific tradition of cybernetics and French technocracy.[102]

The tools of Cold War rationality did not only provide science with the appropriate persona for its role as government advisor; it also allowed society to be imagined in a more utopian manner—following Shklar, a unified society of deliberating free individuals. In the system models, individual choices and actions were the main drivers of the development of the system. The system was in that sense free from the ideological constraints usually associated with society. The democratic nature of the system made sure that, ultimately, these actions would amount to more stable patterns. Yet in the cybernetic imaginary of individual finding through feedback loops more stable patterns, governments in democratic systems would also improve. For example,

---

98 Isaac, "Tangled Loops," 400; Erickson et al., *How Reason Almost Lost Its Mind*, 129–31.

99 Isaac, "Tangled Loops," 419–20.

100 Michel Callon, "An Essay on Framing and Overflowing: Economic Externalities Revisited by Sociology," in *The Laws of Markets*, Sociological Review Monographs (Oxford: Blackwell Publishers, 1998), 244–69.

101 Fabian Muniesa and Michel Callon, "Economic Experiments and the Construction of Markets," in *Do Economists Make Markets? On the Performativity of Economics*, ed. Donald MacKenzie, Fabian Muniesa, and Lucia Siu (Princeton, NJ: Princeton University Press, 2007), 128–62.

102 Bernard Dionysius Geoghegan, "Textocracy, or, the Cybernetic Logic of French Theory," *History of the Human Sciences* 33, no. 1 (February 2020): 52–79, https://doi.org/10.1177/0952695119864241; Galison, "The Ontology of the Enemy," 258–61.

through the applications of Cold War rationality tools, governments could find ways in which individual behavioural patterns could be accommodated and changed without coercion. Assessing the democratic functions of a system and thinking of ways to improve those functions became an important task of social scientists. David Easton defined an indicator of democratic systems in terms of its stability, or the absence of self-undermining impulses.[103] For him, the development of a democratic system works towards a dynamic equilibrium—a state in which actors would still constantly shift their behavioural patterns, but generally have found their place in the model; the system can, and is still able to change, but no major rifts occur. This dynamic equilibrium was static in its own sense, but also provided forward momentum for the political system. Ross writes keenly: "[P]luralist, behaviouralist, and statistical models of a liberal world in perpetual flux, yet constantly reiterating its form."[104] Once again it seemed that utopia was possible since the historical variance of historicism had been overcome.

It is in the context of society as a dynamic unpredictable web of social relations that the weird intertwining of decisions and mechanical rules should be understood. As explained in the previous chapter, in the decisionist imagination, decisions could not be bound by rules, not only because this would undermine their power of establishing a normative order, as in Schmitt's case, but also because purely rationalistic decision making would overwrite the wholistic patterns of life, as in the case of Neurath. In rational choice theory, the choices of agents became completely determined by rules once an optimisation strategy was found. As such, rational choice seemed the total opposite of the decisionist's decision. However, as Nicolas Guilhot points out, the rational agent as choice-making machine closely resembled the politician as sovereign decision maker. These imaginaries of what a decision was were not contraposed, but rather were an extension of one another.[105] Moreover, in an unpredictable environment the choices of the rational actor would not remain stable, but instead would be constantly adapting to

---

103  Kyong-Min Son, "Cybernetic Freedom: David Easton, Systems Thinking, and the Search for Dynamic Stability," *American Political Thought* 7, no. 4 (Fall 2018): 614–45, https://doi.org/10.1086/699907.

104  Dorothy Ross, *The Origins of American Social Science* (Cambridge, UK: Cambridge University Press, 1990), 15.

105  Nicolas Guilhot, "Automatic Leviathan: Cybernetics and Politics in Carl Schmitt's Postwar Writings," *History of the Human Sciences* 33, no. 1 (2020): 128–46, https://doi.org/10.1177/0952695119864244; see also: Daniel Bessner and Nicolas Guilhot, eds., *The Decisionist Imagination: Sovereinity, Social Science and Democracy in the 20th Century* (New York: Berghahn, 2019).

new situations. However, the introduction of game theory, as a means via which to make the choices of a rational actor acting under unstable conditions more predictable, should not be understood as an attempt to render decisions completely predictable—and thus determinate—in a given system. Rather, game theory models were employed in the tumultuous jumble of social systems in order to provide a degree of stable ground—in Callon's terms a platform—which would allow the social scientist to make an effective intervention from within the system. Decisions would thus remain underdetermined, but the use of models would render them effective in the unruly social world, establishing a stable social pattern. The models were thus in line which Schmitt's conception of authoritative decisions that established new social patterns predicated on the decision of the actors, rather than the rules they were following.[106] Moreover, just like Neurath's ideal, ruled-bound decisions could not overwrite the inherent inter-determinacy of the holistic system.[107]

The acknowledgement of the jumbled reality of individual choices contained in the scholarly persona of the scientific expert should, however, not distract one from the fact that their tools were descriptions of an "external" reality and that they imagined society in a very computer-like manner. As such, I would argue, the tools they used should not only be studied for their potential for intervention, but also as tools that propagated a specific image of society and how this image was disseminated in a broader cultural and political context. These tools (and the images of society contained within them) should not be taken solely as "platforms" or scripts for the enactment of "society," but as necessarily bound to the actions of a central and historical political actor—the state.[108] The tools of Cold War rationality in relation to the decisionist imaginary—the themes of which I have only sketched here—

---

106 It should be noted that Schmitt partly predicted this individualisation of sovereign decision-making and did not greet the development with enthusiasm, see: Guilhot, "Automatic Leviathan."

107 Thomas Kuhn' *Structure of Scientific Revolutions* (1962) is often taken to be a refutation of the positivist methodology to which many of the social science where adhering at the time. However, following the logic of the tool-based expertise laid out above, Kuhn's work can better be understood of a continuation of the inter-determinacy logic that many "positivist" scientific experts where professing at the time. For such an argument, see: Peter Galison, *Image & Logic: A Material Culture of Microphysics* (Chicago: University Of Chicago Press, 1997), 790; Joel Isaac, *Working Knowledge: Making the Human Sciences from Parsons to Kuhn* (Cambridge, MA: Harvard University Press, 2012), chap. 5.

108 See sections 1.1 and 1.9 for an explanation of ANT and its shortcomings. See sections 1.3 and 1.8 for my modified approach.

will be further explored later via a case study of the decision model developed by the CPB.

Arendt and Shklar were reacting to the scientific image of the behavioural sciences, whose use of rule-bound rationality seemed to imply manipulatable systems and the design of government policy without any democratic discussion on the aims of such policy. As I hope to have shown, the image of democracy and society in these accounts is more a character than a reality. Planning tools presented a more flexible system in which individual agency was given free rein. However, Arendt's and Shklar's critique did ring true on one aspect: The tools of Cold War rationality further spurred the demise of the idea of a political community. When comparing the writings of the US scholars above with developments in the Netherlands, the clear effect of Cold War rationality on the political discourse of the time can be discerned: a de-emphasis on deliberation as an important political practice, or to be more precise, a narrower conception of what deliberation entailed. Before discussing the application of Cold War rationality tools in the Dutch context, I will first discuss how the Cold War conception of historicity took shape in the Netherlands.

## 3.5 A Personal Order

According to the historian James Kennedy, historicism was immensely important to the self-understanding of the Dutch—indeed, more so than practically in any other nation.[109] Ever since the 19th century, the Dutch had considered themselves just a small nation caught up in the inescapable force of modernity to which they could only yield. Although, as shown in the previous chapter, Kennedy's assessment might need to be nuanced with regard to the interwar period, it seems apt for the post-war era, when the Dutch ruling elite embarked on a rapid programme of modernisation realised via industrialisation and the implementation of social security programmes. As such, the Dutch seemed to accept the nihilism of the on-marching progress that Arendt and Shklar criticised so much in which no human agent had any role to play.

However, the Dutch were not totally comfortable with the progress of modernity. Gerard Alberts (2001) explains that the conscience of the scien-

---

109 James Kennedy, *Nieuw Babylon in aanbouw: Nederland in de jaren zestig*, trans. Simone Kennedy-Doornbos (Amsterdam: Boom, 1995), 25–27.

tists involved with post-war planning efforts were plagued with a *promethe-an tremor*. Like the interwar planners, they sensed that the modernisation process to which they were contributing was causing alienation and nihilism amongst the Dutch public.[110] Whilst this did not prevent them from planning the post-war society, they did so with care, never losing themselves in the abstract world of their mathematical models, attentive for the local conditions and differences in the application of their tools.

The Dutch post-war planning effort cannot be understood outside of the so-called "Breakthrough movement" (*doorbraak beweging*) that emerged from the years of German occupation. The movement sought its own particular end to ideology, attempting to overcome the divisions between Protestants, Catholics, liberals, and socialists. After the war, the Social Democratic Worker's Party (SDAP) merged with the smaller, liberal Free-thinking Democratic League (*Vrijzinnig Democratische Bond*, VDB) and the Protestant Christian-Democratic Union (*Christelijk-Democratische Unie*, CDU) to form the Labour Party as a broad people's party that everyone could join regardless of conviction. Unlike US progressives, the Labour Party sought to create an ideological opposition between progressives and conservatives, even if the programme of the progressives became gradually more pragmatic. To this day, historians discuss whether the "Breakthrough movement" succeeded in its aims.[111] On the one hand, in the general elections of 1946, the Labour Party gained less seats than the parties from which it was constituted before the merger took place. Old political divisions soon re-established their dominance over parliamentary politics and, in that sense, the attempt failed. On the other hand, ideologies and convictions lost their grip on the political imaginary and it was generally agreed that personal conviction had to be paramount in the voting decision rather than to which particular group one belonged.

These considerations question to what extent analysis of the US context, the waning of ideology, and the rise of Cold War rationality can be applied to the Dutch context. In the following sections, I argue that, whilst in broad

---

110  Gerard Alberts, "Wiskunde en wederopbouw: Deskundigen en hun prometheïsche huiver," *Gewina: Tijdschrift voor de Geschiedenis der Geneeskunde, Natuurwetenschappen, Wiskunde en Techniek* 24, no. 4 (2001): 242–58.

111  For an overview, see: Bram Mellink, "Tweedracht maakt macht: De PvdA, de doorbraak en de ontluikende polarisatiestrategie (1946-1966)," *BMGN - Low Countries Historical Review* 126, no. 2 (January 2011): 35–41, https://doi.org/10.18352/bmgn-lchr.7309; cf. Tity De Vries, *Complexe Consensus: Amerikaanse en Nederlandse intellectuele in debat over politiek en cultuur, 1945-1960.* (Hilversum: Uitgeverij Verloren, 1996), 208–27.

strokes it can, discomfort with the nihilism of progress and the application of Cold War rationality took a different form. First, in this section, I describe the attitude many intellectuals took towards modern historicity in the first decades of the Cold War and how this influenced initial planning efforts. Against the nihilistic progress of historicism, Dutch intellectuals imagined the personal moral order as a *safe home*, as Ido Weijers calls it—a counter-weight to the otherwise strong waves of development of history. Second, in the subsequent sections, I will focus on the import and adaptation of Cold War rationality by the CPB—spelling out their consequences for the political imaginary in the process.

In 1952, the Dutch novelist Willem Frederik Hermans published *I'm Always Right*. Already, prepublication, the book caused controversy for the fierce anti-Catholic sentiment of its main character, often expressed in offensive language: "Catholics! The most shabby, lousy, blacklegging, rotten part of our people!"[112] Although it concerned the language of a fictional character, Dutch Catholics nevertheless felt deeply insulted. For example, Catholic writer Anton van Duinkerken attacked Hermans by stating that his anti-papist sentiments were worse than the gravest antisemitism.[113] Such remarks were grist to Hermans' polemicist mill. He immediately fired back by pointing out the hypocrisy of Catholics in invoking the law against the discrimination of minorities, whilst the prosecutions of Jews during the German occupation happened with scant protest from those very same Catholics.[114]

Hermans had a point. Catholic thinkers had, promoting their system of corporatism as an alternative to liberal democracy in the interwar years, fiercely attacked the perceived dangers of liberalism and communism. Co-operation with the Nazis, who professed a different corporatist system, was silently agreed upon during the occupation, as fascism seemed the lesser evil compared with the other political systems.[115] In 1934, for example, the Catholic legal scholar Willem Pompe had criticised the introduction of anti-discriminations laws. Based on the system of natural law, Pompe had concluded that the universality of the law obscured its underlying moral principle. In what he considered a dangerous liberal move, the law detached the norms of

---

112 Willem Frederik Hermans, *Ik heb altijd gelijk* (Amsterdam: G.A. van Oorschot, 1951).

113 Anton van Duinkerken, "Schrijvers Voor de Keuze," *De Tijd*, January 12, 1951.

114 Hermans, Willem Frederik, "Het knipselbureau," *Podium*, 1952.

115 James Chappel, *Catholic Modern: The Challenge of Totalitarianism and the Remaking of the Church* (Cambridge, MA: Harvard University Press, 2018), chap. 2.

society from the content of the law itself.[116] Pompe, who saw natural law as an alternative to legal positivism and liberal democracy, argued that a corporatist system would provide the vital link between law and the norms of society. He continued to express these views even during the occupation.[117]

However, following liberation, Pompe knew that his argument would no longer be accepted, thus shattering his dream of a corporatist future. Indeed, in a remarkable turn of events, Pompe eventually joined the Breakthrough movement.[118] A vision of a society without confessional division provided him with a new vehicle via which to continue his previous scholarly and critical endeavours. Instead of a corporatist system, it had to be individual personal norms that could foster the relationship between social norms and the content of the law.[119] These personal norms were not completely individualistic; they were still formed in reciprocity with the social *milieu*—Pompe thus stressed the importance of a safe family home were such reciprocal relations could be fostered. The outside world might lack an authoritative figure, inside the family household, a strong character could still be fostered under the guidance of a benevolent father figure. The safe household and family life became a leading theme of Pompe's post-war writing and would remain so even when he turned his attention to juvenile delinquency.[120]

Pompe was not alone in his newfound emphasis on personal norms as an alternative to social norms in the post-war years. Willem Banning's personalism, which emphasised the foundation of socialism in personal religious convictions (briefly discussed in the previous chapter), gained a new audience in these years.[121] Pompe was joined at the University of Utrecht by a new generation of psychologists led by Martinus Langeveld, Frederik Buytendijk, and Pieter Baan (the so-called Utrecht School), who argued, on the basis of phenomenology, that the alienated individual could only find refuge in the safe family home, foregoing any other community or social

---

116 Willem Pompe, *Het nieuwe tijdperk en het recht*, Vrij Nederland (Amsterdam, 1945).

117 Willem Pompe, "Verruiming van de toepasselijkheid van wettelijke strafbepalingen," *Tijdschrift voor Strafrecht*, 1943, 112–13.

118 De Vries, *Complexe Consensus*, 208–10.

119 Willem Pompe, "Macht en recht," *Annalen van het Thijmgenootschap* 39 (1950): 101–6.

120 Ido Weijers, *Terug naar het Behouden Huis: Romanschrijvers en wetenchappers in de jaren vijftig.* (Amsterdam: Uitgeverij SUA, 1991), 103–105.

121 Arie L. Molendijk, "Willem Banning and the Reform of Socialism in the Netherlands," *Contemporary European History* 29, no. 2 (May 2020): 139–54, https://doi.org/10.1017/S096077732000003X.

organisation that could provide meaning in an otherwise abstract and cha-
otic modernity.[122] The economic planners of the CPB similarly sought to
explain economic and political processes as the aggregation of individual
actors. Even Hermans, whose anti-clerical sentiments seemed opposed to the
religious convictions of both the Utrecht School and Banning, wrote novels
about the responsibility of alienated individuals against the background of a
chaotic and contingent world.

Like their US counterparts, Dutch intellectuals seemed to have lost
their belief in "the social" as an alternative to an alienated and individu-
alised modern society. Instead, their vision for the future revolved around
the individual and personal norms. However, as the example of Hermans
and Pompe also shows, the political context of this post-war thinking was
significantly different for the United States. Marked by questions of guilt
stemming from the German occupation, Dutch intellectuals struggled to
continue their aversion to American culture, especially when faced with the
power of the other ideological enemy, the Soviet Union. Although more in-
spired by religious and existentialist writings, Dutch authors drew from the
lexicon shaped by German intellectuals such as Martin Heidegger and Karl
Jaspers upon which Arendt and Löwith had built.[123]

Hermans was not only a novelist. Until 1966, he had also perused a ca-
reer in academia as a geologist. In contrast to the interwar scholars discussed
in the previous chapter, Hermans never attempted to connect his scientific
activities, either with broader social concerns, or with individual meaning.
Indeed, quite to the contrary, he thought such a feat was impossible. Science
sought to understand the world in a new abstract language of laws in order
to reach certainty, however, human beings could never find such certainty in
describing their surroundings.[124] The world of human experience was bound
too much to its own narrow horizon; too much in a state of flux; and too
chaotic for a stable language to exist. Science could overcome this reality sim-
ply by departing from experience and not using language built on the lived
experience. In that sense, science never described reality; it described the
world in so far as it was transformed into the detached language of science.

---

122  Ido Weijers, "De binnenhuisarchitecten van de Nederlandse verzorgingsstaat.
Menswetenschappers en doorbraak," *Gewina: Tijdschrift voor de Geschiedenis der
Geneeskunde, Natuurwetenschappen, Wiskunde en Techniek*, no. 24 (2001): 196–206.

123  Weijers, 80-82; 117-133; Jan Willem Duyvendak, *De Planning van Ontplooiing,
Wetenschap, Politiek En de Maakbare Samenleving*, Nederlandse Cultuur in Europese
Context, Mongrafiëen En Studies 15 (The Hague: Sdu Uitgevers, 1999), 23–31.

124  Willem Frederik Hermans, *Het sadistische universum* (Amsterdam: De Bezige
Bij, 1964), 111.

Reality, Hermans famously proclaimed in the preamble to his collection of short stories and novella's *Paranoia* (1953), could only truly be described by one word: "chaos."[125]

According to Hermans, the novelist used the worlds of lived experience to entangle his fictional protagonists in a web of artificial order. This was not a reflection of an outside reality, but the personal order of the author. In Hermans' novels, his protagonists found themselves caught in a logic that they could not understand, which they struggled to make sense of, trying to belong to the social world they inhabit but ultimately fail to comprehend. Their ultimate mistake is their wish to act upon this order. In one of his major works, *The Darkroom of Damocles* (1958), Hermans' protagonist, Osewoudt, wants to join the resistance. He acts in a shadowy world in which everyone seems to play a double role and the only certainty is given by the idea that he acts on the command of a resistance member he trusts, called Dorbeck. After the war, however, he is accused of working for the Nazis. The only resistance member he trusted cannot be found. The psychologists that examine him suggest that Dorbeck was just a figment of his imagination. The only photograph that could prove the existence of this figure outside of authority fails to be developed in the dark room, leaving Osewoudt in a dark, absurd world.[126]

Hermans played a sadistic game with his protagonists.[127] Implicitly or explicitly, he wrote the creator of the chaotic world into his novel—that is, the novelist himself.[128] Yet, as the Osewoudt argues against the psychologist that is examining him after the war: "I acted on Dorbeck's commands. But the fact I obeyed his commands does not mean I'm acquitted of my own responsibility. You're confusing two conceptions."[129] The mistake of Hermans' protagonists is that they sought to belong to a social order, an artificial order, incomprehensible by its very nature. Instead, they should have acted on their own personal order. This order is just as artificial as the order of society, the author, or of science, but at least it is their own order. It is an order they can take responsibility for. In 1953, Hermans wrote:

---

125 Willem Frederik Hermans, "Preambule," in *Paranoia* (Amsterdam: G.A. van Oorschot, 1953), 12.

126 Willem Frederik Hermans, *De donkere kamer van Damokles* (Amsterdam: G.A. van Oorschot, 1958).

127 Weijers, *Terug naar het Behouden Huis*, 112–13.

128 Weijers, "De binnenhuisarchitecten," 109.

129 Hermans, *De donkere kamer van Damokles*, 262.

> In the near future, […] individual liberties will be constrained to such
> extent that no one would longer care to make an image in words of the
> world or oneself. […] In such a world no one would think to act for one-
> self or to proclaim something.[130]

It was a dire outlook, perhaps ironic, but also an acknowledgement of the
inherently chaotic nature of reality—an acknowledgement that images and
words would always fail to capture reality. It was an image of totalitarianism,
as Arendt had described it.[131] Words started to mean nothing; distinctions
and stories becoming meaningless. The only thing that could counteract
such a totalitarian future, Hermans implied, was the individual act of creat-
ing personal images upon which to act. It could, however, by no means be a
collective image, and even less an image created by science.

Hermans' commitment to the personal image perhaps found its most
colourful opponent in the planner Fred Polak. Working for the CPB from
its inception and taking over its directorship in 1955, he scolded the post-
war attitude embodied by Hermans in which collective futures were deemed
fictitious and dangerous. As mentioned in the introduction to this chapter,
Polak spoke of *un-futurerisation* and temporalism—the result of foregoing
any meaningful interpretation of the future. In his *The Future is Past* (1955),
he argued that the great power of civilisations had precisely been that they
formed collective images of the future. Thus, future images gave society the
power to change itself. This represented an indispensable trait of civilisation,
as it would be able to adapt to new situations. In his peerless and often in-
comprehensible prose, he wrote: "Through the moving images of the future,
man, world and God meet each other in synchronously moving time. After
this encounter, man, world and God will change, because time itself is the
origin of this leap."[132] His quasi-religious language suggested that time was
moving ever-forward through images of the future, and time enunciated it-
self through such images of the future. Science had a large part to play in
the creation of future images, as the power of the rational mind, Polak ar-
gued, propelled the imagination of humankind forwards. The accuracy of
science-based prophesies (rather like Löwith, Polak saw scientific prognosis
as a continuation of religious prophecy) did not matter as much as the pow-
er it gave to society to change itself.

Polak shared the cultural diagnosis of his contemporaries that mod-

---

130  Hermans, "Preambule," 11.
131  Arendt, "The Concept of History," 87–88.
132  Polak, *De Toekomst is Verleden Tijd*, 2:83.

ern man had been alienated in atomised individualism.[133] However, instead of finding refuge in community or social organisation, individuals had to find their home in future images; in the images and words that man created. For Polak, planning tools were not so much stabilisers, but again, as with Hermans, images upon which to act. They functioned in the same manner: Planning techniques were tools that could guide individual chaotic actions towards a more stable future. In that sense, Polak was ultimately not that different from Arendt or Hermans when he emphasised the artificial nature of man making his own story in history. Moreover, his future images seemed more utopian than ideological.

## 3.6 The Early Days of Dutch Planning

Polak's turn toward the personal and artificial order represented a larger turn away from community ideals (or "the social") and towards individual preferences in the CPB. This turn, as I hope to show in the next three sections, was strongly connected with the development of new planning tools based on the theories of Cold War rationality. First, however, it is important to give a little bit more background information of the founding of the CPB, its relation to the breakthrough movement, and the political environment in which it had to manoeuvre in the early years. As a number of historians have argued, the founding and institutionalisation of the CPB was, after a promising start, a rocky affair in which the bureau struggled to convince politicians of the need for economic planning.[134] When in the 1950s, the CPB was finally able to establish itself as an authoritative government advisor, its vision for what economic planning actually entailed had fundamentally changed. Most authors attribute this change in its planning ideals to the difficult political circumstances.[135] As I will argue, however, this change can also be under-

---

133 De Vries, *Complexe Consensus*, 155.

134 J. Passenier, *Van planning naar scanning: Een halve eeuw Planbureau in Nederland* (Groningen: Wolters-Noordhoff, 1994), 22–32; Adrienne van den Bogaard, *Configuring the Economy; The Emergence of a Modelling Practice in the Netherlands, 1920-1955* (Amsterdam: Thela-Thesis, 1997), 50–59; Arnold Wilts, "Economie als Maatschappijwetenschap: Een sociologische geschiedenis van de economische wetenschap in Nederland (c. 1930-1960)" (Amsterdam: University of Amsterdam, 1997), 88; Gerard Alberts, *Jaren van berekening: Toepassingsgerichte initiatieven in de Nederlandse wiskundebeoefening, 1945-1960* (Amsterdam: Amsterdam University Press, 1998), 254–59.

135 Adrienne van den Bogaard, "The Cultural Origins of the Dutch Economic Modeling Practice," *Science in Context* 12, no. 02 (June 1999), https://doi.org/10.1017/

stood in the light of a Cold War historicity and the move towards the embrace of personal normative orders as the vehicle for political action.

Tinbegen and Hein Vos, the founders of the CPB, both worked on the Labour Plan of 1935 (see previous chapter) and were members of the Labour Party. Wim Schermerhorn, the first prime minister after the war and under whose auspice the bureau was founded, was also a member and had been one of the most prominent spokes persons of the breakthrough movement. It is therefore unsurprisingly that the early Central Economic Plans that the CPB produced reflected the philosophy of the breakthrough movement, as the plans seemed to assume that the bureau's planning figures could be broadly accepted by all political parties and social organisations regardless of ideology or confession. The form of the plans reflected this intent. The CPB presented, on the basis of input-output modelling (a technique familiar to Tinbergen from his days at the Dutch Bureau of Statistics), two forecasts for the Dutch economy, one in which it was assumed that no new policies were implemented, and one were the recommendations of the bureau were followed (see figure 3.1). Although Tinbergen stressed in his introduction to the plans that political discussions on the plan figures was of the utmost importance, there was little room for politicians to question the ideological starting points of the forecasts.[136]

It soon became clear, however, that the ridged form of the economic plans were not going to be accepted by all the governing parties concerned. After the elections of 1946, the Labour Party formed a coalition with the Catholic People's Party (Katholieke Volkspartij, KVP). This broad coalition seemed to be the result of the cooperative post-war spirit in which former political opponents would temporarily set aside their ideological differences to work together on the reconstruction of the war-torn Netherlands. With regard to economic issues, however, the cabinet was characterised by bitter bickering between the Catholic Ministers of Economic Affairs, Gerardus Huysmans and Jan van der Brink, and the Labour Party Minister of Finance, Piet Lieftinck.[137] Van der Brink, inspired by the ideas of the German Ordo

S0269889700003458; Willem Camphuis, "Tussen analyse en opportuniteit: De SER als adviseur voor de loon- en prijspolitiek" (Nijmegen: Radboud Universiteit Nijmegen, 2009), 44–70; Arjo Klamer, *Verzuilde Dromen: 40 Jaar SER* (Amsterdam: Balans, 1990), 27–45.

136 Elsewhere I have analysed these early Central Economic Plans at length: Tom Kayzel, "A Night Train in Broad Daylight: Changing Economic Expertise at the Dutch Central Planning Bureau 1945 – 1977," *Œconomia* 9, no. 2 (October 22, 2019): 342–52, https://doi.org/10.4000/oeconomia.5613.

137 Tim Maas, "Tussen Wantrouwen en Waardering: het Centraal Planbureau en

Liberals,[138] feared that the economy became too state-led, and proposed an industrialisation agenda in which the representatives of the major industries took a leading role.[139] Huysmans, following his corporatist ideals from before the war, made the Social Economic Council (Sociaal-Economische Raad, SER)—in which representatives of industries and labour had to discuss and propose the outlines of economic policy—the leading advisory institute for the government. Although the CPB was given a seat on the SER, it was clear that the bureau had been side-lined in its capacity as an important government advisor. Consequently, it appeared that the ideal of the Breakthrough movement had failed.[140]

Tinbergen realised that the failings of the early economic plans was closely linked to the ridged form of the plan. His strategy was to diversify the forecasts so they would better reflect different ideological outlooks on the economy. Input-output modelling was, however, too time consuming to be used for a variety of forecasts. For such a feat more flexible planning tools were necessary.[141] Most prominently amongst the planning techniques chosen was the introduction of the macroeconomic model, which allowed the planners of the CPB to deal in a more conjectural manner with the economic figures they were compiling and analysing.[142] Another important technique

---

zijn invloed op de economische politiek in vier na-oorlogse Kabinetten, 1945 - 1952" (Amsterdam: Vrije Universiteit Amsterdam, 1986); Merijn Oudenampsen and Mellink, *De markt als meester: Een geschiedenis van het neoliberalisme in Nederland.* (Amsterdam: Boom, Forthcoming), chap. 2.

138 Ordoliberalism is a German School of economics influential on the post-war chancellors Konrad Adenauer and Ludwig Ehrhard and often taken to be a sibling of neoliberalism. See: Jonne Harmsma, "Voorbij de oude ballast: neoliberalisme en het nieuwe marktdenken van Nederlandse economen (1945-1952)," *Tijdschrift Sociologie* 15, no. 3 (December 1, 2019): 253–70, https://doi.org/10.5117/soc2019.3.002. harm.

139 Herman de Liagre Böhl, Jan Nekkers, and Laurens Slot, eds., *Nederland industrialiseert! Politieke en Ideologiese strijd rondom het naoorlogse industrialisatiebeleid 1945 - 1955* (Nijmegen: Socialistsiche uitgeverij Nijmegen, 1981), 218–36; Merijn Oudenampsen and Bram Mellink, "Bureaucrats First: The Leading Role of Policymakers in the Dutch Economic Paradigm-Shift of the 1980s," *TSEG, Low Countries Journal of Social and Economic History* 18, no. 1 (2021).

140 Kayzel, "A Night Train in Broad Daylight," 343–44.

141 Kayzel, 344–46.

142 The macroeconomic model became the flagship of the CPB. In general, the development of macroeconomic modelling has been seen as one of the most important developments in the economics profession. Consequently, much has already been said about the workings of macroeconomic modelling and its political and cultural underpinnings, to which I have little to add. Therefore, I will leave the issue and focus exclusively on decision modelling. For more information on the macroeconomic models of the CPB, see: Anton Barten, "The History of Dutch Macroeconom-

was the decision model, which divided the CPB prognoses into multiple scenarios, calculating the outcomes and effectiveness of each. These new methods were crucial in fostering a consensus culture in Dutch politics and the acceptance of economic planning so characteristic of post-war governments more generally.[143]

What has gone largely unnoticed in the discussion on the early planning efforts in the Netherlands is that the move towards a new more flexible planning ideal also entailed the embracing of individuals as the main agents of the economic system. In breaking away from confessional-orientation of politics, the move to a new planning ideal cannot only be read as a failure of the Breakthrough movement, but also as a success. As I will argue in the following sections, the ideal of deliberation inherent to the planning project took a more individualistic turn in the 1950s. Like their intellectual counterparts, the planners of the CPB ultimately embraced the personal normative order as the starting principle of the modernist project of economic planning. To this end, I will adopt the development of decision models as a case study and investigate what the effects of this new planning ideal on Dutch politics precisely were. It is in decision models that the influence of Cold War rationality, which Dutch planners imported from Norway and the United States, becomes clearly visible. The relation between the tools of Cold War rationality and political culture will subsequently also be the focus of the next three sections.

ic Modelling (1936-1986),” in *Challenges for Macroeconomic Modelling*, Contributions to Economic Analysis 178 (Amsterdam: North-Holland, 1988); Adrienne Van den Bogaard, “Past Measurment and Fututre Prediction,” in *Models as Mediators, Perspectives on Natural and Social Science* (Cambridge, UK: Cambridge University Press, 1999); Harro Maas, *Economic Methodology: A Historical Introduction* (London: Routledge, 2014), chaps. 4 & 5; Mary S. Morgan, *The History of Econometric Ideas* (Cambridge, UK: Cambridge University Press, 1991), chap. 4.

143  For the relation between the CPB models and consensus culture, see: Van den Bogaard, “The Cultural Origins of the Dutch Economic Modeling Practice”; Frank den Butter and Mary S. Morgan, “What Makes the Models-Policy Interaction Successful?,” *Economic Modelling* 15 (1998): 443–75; Frank Den Butter, “The Industrial Organisation of Economic Policy Preparation in the Netherlands” (Quality control and assurance in scientific advice to policy, Berlin-Brandenburg Academy of Sciences and Humanities, Berlin, 2006), http://econpapers.repec.org/paper/vuaw-paper/2006-7.htm; Willem Halffman, “Measuring the Stakes: The Dutch Planning Bureaus,” in *Scientific Advice to Policy Making: International Comparison* (Opladen, DE: Verlag Barbara Budrich, 2009), 41–65; Harro Maas, “Calculators and Quacks: Feeling the Economy’s Pulse in Times of Crisis,” *Research in the History of Economic Thought and Methodology* 36B (October 2018): 23–39, https://doi.org/10.1108/S0743-41542018000036B003.

## 3.7 Ragnar Frisch: The Making of Homo Economicus

A crucial tool that allowed the CPB to make their economic forecasts more flexible and able to incorporate uncertainty was the decision model. The first to coin the notion of the "decision model" was the Norwegian economist and planner, Ragnar Frisch. When Tinbergen adopted the notion in 1950, he built on Frisch's theoretical groundwork. Therefore, in order to understand the development of decision modelling in the CPB, and the role of behaviourism and Cold War rationality in this development, an examination of Frisch's initial work is a prudent first step. As I will show, already in this groundwork, many of the key elements of the decision model and their implications were in place. To understand how the idea of democratic decision making developed into a system predicated on aggregating individual choices, it is necessary to dig deeper into the technical details of the model itself. Consequently, the following sections, when taken together, offer an extensive case study of the details of the decision model.

Tinbergen's and Frisch's careers as economists and planners were closely intertwined:[144] Frisch was slightly older than Tinbergen and took the lead in the founding of The Econometric Society and the journal *Econometrica* in 1930. Tinbergen soon joined the society and enthusiastically contributed to the development of many econometric methods. In the interwar period, both Frisch and Tinbergen would develop models that are generally considered to be influential precursors for post-war macroeconomic models. Directly after the war, in their respective countries, they both led planning institutions and would go on to work on developmental economics for the International Monetary Fund (IMF) and the United Nations (UN) in the 1950s. Their work would receive the highest recognition when they jointly received the first Sveriges Riksbank Prize in Economic Sciences (also known as the Nobel prize in economics) in 1969.

Frisch started to work on his first decision model as part of his early planning effort in Norway. These were intended to work in tandem with a large econometric model—the so-called "Oslo Channel Model".[145] Frisch's idea was that the Oslo Channel Model could serve as the ultimate apparatus for the coordination of the Norwegian economy; to be used by indus-

---

144 On this close connection, see also: Erwin Dekker, "Entangled Economists: Ragnar Frisch and Jan Tinbergen," *Erasmus Journal for Philosophy and Economics* 12, no. 2 (Winter 2019): 65–85, https://doi.org/10.23941/ejpe.v12i2.451.

145 Olav Bjerkholt and Steinar Strøm, "Decision Models and Preferences: The Pioneering Contributions of Ragnar Frisch," in *Constructing and Applying Objective Functions*, ed. Andranik Tangian (Heidelberg: Springer, 2002), 21.

tries, unions, policymakers, and the government alike. The problem with this large-scale econometric model, which was supposed to be tackled by smaller decision models, was twofold. First, how could a very diverse public make use of a highly technical model without an in-depth knowledge of economics? Second, how could the wishes and actions of one political actor take into account those of other political actors? This latter problem was also a theoretical challenge for the planner. Whilst macroeconomics could account fairly well for the internal dynamics of economic development, this was less so for external factors such as governments and labour unions that tried to influence economic development via economic policy or strikes. Tackling this problem, Frisch wanted to move away from what he called "the on-looker approach": a naïve approach to economic planning, in which the planners themselves discount their own influence from the description of the economic dynamics.[146] The issue was thus fundamentally reflective in nature: How could planners account for the influence they themselves exerted on the economy? Typical of those employing tool-based expertise, Frisch saw himself as part of a complex network that was subject to his own actions and understood that he would himself would shape the reality he was ultimately trying to describe.

Frisch attempted to solve these problems by introducing a *preference function*, a mathematical formula that could combine many individual preferences into a collective preference. Frisch had pioneered the development of such a function in 1934, when a brewery asked him to study the effects of rising duty and prices on the consumption of beer.[147] Frisch sent questionnaires to students asking hypothetical questions regarding their willingness to continue buying beer subject to various price increases. In this way, Frisch attempted to measure what economists term the "utility" of beer, or in other words, the satisfaction of drinking beer set against its price. To this end, he developed a simple *choice model*, an early version of the rational choice frameworks that would dominate neoclassical economics after the war and is considered one of the techniques that defined Cold War rationality.[148] This rational choice framework or theory consisted of a set of axiomatic rules

---

146 Frisch, "Preface to the Oslo Channel Model," 249.
147 Olav Bjerkholt, "Frisch's Econometric Laboratory and the Rise of Trygve Haavelmo's Probability Approach," *Econometric Theory* 21, no. 3 (June 2005): 508, https://doi.org/10.1017/S0266466605050309.
148 Philip Mirowski, "Twelve Theses Concerning the History of Postwar Neoclassical Price Theory," *History of Political Economy* 38, no. annual suppl. (2006): 343–80, https://doi.org/DOI 10.1215/00182702-2005-029.

that served as a stand-in for the assumed rationality that the students used in making their choices.[149]

By applying the choice model, Frisch found a middle ground in the debate on the measurement of utility. In contrast to the Austrian School (see also section 2.4), Frisch claimed it was possible to make such measurements, although, unlike the British economist Stanley Jevons, he claimed that it was not necessary to take into consideration the complex psychological factors that usually determine human actions.[150] According to the philosopher Catherine Herfeld, Frisch did so by translating the unruly world of consumer behaviour into an idealised model world—a move similar to the thought experiments that philosophers often employ.[151] In such worlds or thought experiments, both the situation of the choice and the reaction of the consumer become simplified. This offers a way to gain excess to specific intuitions and to magnify them so they can be studied—much like bacteria are studied on a petri dish. Importantly, to enact or perform these thought experiments, it was crucial that the student did not simply fill in a form. Instead, trained interviewers were employed to ensure the optimum idealised conditions were created for respondents to channel and magnify their intuitions.[152]

Decision models incorporated the same mechanics that had been used in the beer price research. In Frisch's ideal, the decision model should be used in multiple steps. First, survey research amongst the general population should be employed to indicate general preferences for (or against) the goals and instruments of economic policy.[153] Here, the choice model could be used to translate the variety of preferences in society into a single set of collective preferences. An optimal utility—the satisfaction of as many preferences as possible with the most minimal possible interventions and regulation—was the criterium used to combine these preferences. For example, if employment has a higher utility value than higher wages, employment is more sat-

---

149 Catherine Herfeld, "The Diversity of Rational Choice Theory: A Review Note," *Topoi* 39 (2020): 11, https://doi.org/10.1007/s11245-018-9588-7.

150 David Colander, "Retrospectives: Edgeworth's Hedonimeter and the Quest to Measure Utility," *Journal of Economic Perspectives* 21, no. 2 (June 2007): 215–26, https://doi.org/10.1257/jep.21.2.215.

151 Catherine Herfeld, "Imagination Rather than Observation in Econometrics: Ragnar Frisch's Hypothetical Experiments as Thought Experiments," *HOPOS* 9, no. 1 (Spring 2019): 35–74.

152 Ragnar Frisch, "Co-Operation between Politicians and Econometricians on the Formalization of Political Preferences," in *Economic Planning Studies: A Collection of Essays by Ragnar Frisch* (Dordrecht / Boston: D. Reidel Pusblising Company, 1976), 41–86.

153 Frisch, "Preface to the Oslo Channel Model," 252–54.

isfying, even set against higher costs, whilst higher wages are also preferable, but not if set against higher costs. In such an example, the utility of employment has primacy in a collective preference over high wages.

Subsequently, unions, industry leaders, and politicians should, under the guidance of the economic planner, discuss these general outcomes, formulating a common economic policy that accounts for the economic consequences of the preferred measures. This deliberative step, Frisch admitted, entailed so many social institutions and their associated power-dynamics that it was too complex to properly model, even in Frisch's method of idealisation. Consequently, decision models were not considered descriptive or taken as a representation of reality. Instead, their function as tools was emphasised. Decision models could be used by captains of industry, union leaders, and politicians to formulate their preferences and goals in a uniform manner and, in this manner, assisted in finding common ground. Frisch's models thus imagined the economy and political order as a combined system—that of independently moving actors, rendering a system itself was too complex for any model to control, yet that still could be managed by governments.

The final step described by Frisch was that of optimisation. Agreeing on the means and ends of economic policy, Frisch thought the political elite would find themselves faced with too many options for realising those goals with the given instruments. In such a case, the decision model could be used to calculate the optimal use of the instruments for the given goals.[154] In short, the model helped to make the final decision. For Frisch, this last step remained very much an ideal; his own practice of planning never aimed to go beyond the deliberative phase. However, this did not prevent him from speculating about what might become possible with these techniques in the future. In his "Preface to the Oslo Channel Model" (1957), Frisch considered the impact of his modelling technique could have in the future on the level of decision making:

> I have no faith in a planning system where each region […] is left free to submit, according to its own ideas, a suggestion for a plan—investment plan and/or plan for current account operations—within its border, and a subsequent attempt at 'co-ordinating' these regional plans at the top level by trial and error or rounds of 'iterations' by consultations between the top level and the regional authorities. For effective planning one must start by a rather definite frame to be prescribed for the subsequent de-

154 Frisch, 256–57.

> tailed regional—or even enterprise—plans to be prepared at the lower
> levels.[155]

Instead of discussing planning on the central level, Frisch proposed the use
of a uniform framework that could inform and coordinate lower level re-
gional plans. Using an input-output scheme, regions could indicate their
assets and needs to a central point that could then calculated the optimal
distribution of goods. Exactly how the decision-making process for the dis-
tributions of goods should be organised was, according to Frisch, still too
complex to model adequately, although he hoped simulation techniques to
address this problem would emerge in the future. His ideal was expressed in
terms of a "game", in which a central actor would lay out the rules and the
lower levels could act and decide in the manner they wished, as long as they
obeyed the rules. Thus, it was the job of computer simulation to find the
optimal rules under which such "games" could be played.[156]

Frisch's work contains several tropes that are now taken as typical of
Cold War rationality and social engineering expertise. The first and most
glaring is the idea of the *homo economicus*. In Frisch's *preference function,*
workers demanding employment act in essentially the same manner as stu-
dents buying beer. In what later became known as rational choice theory,
workers and students all act in accordance with a set of strict, formalised
rules, applied rigidly like a computer. It is, however, important to stress that
Frisch used rational choice theory, not as a descriptive model, but as an ideal-
isation technique. In that sense, he called *homo economicus* "a fiction" needed
to find "behavioural regularities."[157] This process of idealisation was also a
messier practice than the clean formulas of preference functions or rational
choice theory may suggest. The questionnaires used to gain data on students'
preferences on beer were characterised as "conversational interviews": Much
of the success of the interview was dependent on the interviewer's ability
to convey the idealised situation and the respondents' ability to imagine
themselves in those hypothetical situations. In that sense, there was a genu-
ine conversation going on between the interviewer and the respondent that
could not be caught in a standardised process, or the same axiomatic rules of
rational choice theory.[158]

---

155  Frisch, 271.
156  Frisch, 258–59.
157  Herfeld, "Imagination Rather than Observation in Econometrics," 44.
158  Ragnar Frisch, "From National Accounts To Macro Economic Decision Mod-
els," *The Review of Income and Wealth* 4, no. 1 (March 1955): 1–26, https://doi.

The same applied to the use of the decision model by political elites. On the one hand, the idealisation process of the choice model stripped away the substance and strife associated with political demands and transformed them into questions of preference. Frisch saw this as the great benefit of the decision model: The political actor was entering the simplified and idealised world of the choice model able to leave behind certain stubborn biases. Union leaders could, for example, falsely believe that they always had to strive for higher wages, whilst the decision model could show that this "preference" was only secondary to the "preference" for full employment.

On the other hand, politics was not reduced to economic science, as Frisch stressed the art of politics and scientific expertise. Decision models were not ready-made tools, but required the economic expert as interlocutor. There had to be a "back and forth" between expert and politician to ensure that the party in question could recognise the formalised preference as their own. As Frisch wrote: "I think, it remains that valuable information may be obtained by means of interview questions, provided the questions are wisely formulated in a conversational manner, and not simply carried out by some youngster in the opinion poll trade."[159] In that sense, Frisch's planning practice was still far removed from the automatic opinion apparatus that Schmitt had predicted (as quoted in the introduction of this chapter). This is because preferences were not fully private, as they could only be known through public conversations. It is therefore unsurprising that Frisch stressed the need to communicate the results of the decision models with the broader public through news media and stimulate public debate.[160]

It was only when Frisch imagined the future that the advancement of computer technology might enable political decision making to become completely like a computer game. Frisch continued to emphasise that the political and economic system into which he was sought to intervene was too complex to be controlled. Neither the economic planner nor the state could imagine themselves as standing independently or completely sovereign outside of this system; their actions shaped the system, but could not manipulate it from a top-down perspective. Frisch's speculation on the future of cybernetic systems, however, suggests that should computers grow powerful enough, such regulation of the system would become possible. Frisch was

---

org/10.1111/j.1475-4991.1955.tb01063.x.

159  Frisch, "Co-Operation between Politicians and Econometricians," 45.

160  Olav Bjerkholt, "Interaction between Model Builders and Policy Makers in the Norwegian Tradition," *Economic Modelling* 15, no. 3 (July 1998): 317–39, https://doi.org/10.1016/S0264-9993(98)00015-7.

heading into ambiguous territory—one in which a rule-bound type of rationality could become all dominating—however, it is important to stress here that this regulation of the economy could only come about if every economic actor were to adopt the same economic tools. Anticipating Callon by almost twenty-five years, Frisch considered a system, the course of which could be predicted as only possible through a network of coordination tools.

## 3.8 Tinbergen: The Making of the Homo Politicus

Decision models of the kind developed by Frisch played an instrumental role in the new planning idea developed by CPB in the 1950s. However, rather than the wholesale adoption of Frisch's theories, the CPB planners built their own distinct version of decision modelling. In this section, I will analyse how Tinbergen adopted Frisch's ideas. Then, in the subsequent section, I discuss its further development by another CPB economist: Henri Theil. In this specifically Dutch development, a turn towards a formalisation of the interaction of political actors can be discerned. In other words, rationality, as a fuzzy human practice of deliberation, was replaced by computer-inspired notions of rule-following rationality. Such a development came about, both through the influence of US theories of rationality, and political pressure. Yet, Tinbergen's theories do not adhere to the image of the alienating machine reducing politics to technocratic decisions. Rather, they define a new role for the planner, the government, and the state in the management of the economy on the basis of the applications of tools.

Compared to Frisch's elaborate step-by-step plan for the use of decision models, the models developed by Tinbergen in the early 1950s were considerably simpler.[161] Instead of aggregating collective preferences, the goal of the model was the definition of welfare with the preference of a single political actor as its input. Tinbergen thus disposed of the collective preference function and imagined the collective preference already as unified in one political voice.[162] In essence, Tinbergen's models functioned as inverted welfare

---

161 See in particular: Jan Tinbergen, *On the Theory of Economic Policy*, Contributions to Economic Analysis 1 (Amsterdam: North-Holland Publishing Company, 1952).

162 Around the same time, Kenneth Arrows published a famous article in which he problematised the idea of aggregating individual preferences via democratic decision-making. Hendrik Houthakker, another of Tinbergen's protegees, used Arrow's theory to criticise his former teacher on the democratic potential of his decision models. Tinbergen considered this critique irrelevant since he believed that it was

models (of the kind mentioned in section 2.4). Rather than investigating under which conditions maximum welfare is possible, decision models took the conditions as input and formulated the corresponding notion of welfare as output. These conditions consisted of five input categories: two were determined by the political actor, namely, (a) the goals and (b) instruments of economic policy; the economic modeller determined two additional categories: (c) boundary definitions, such as an equilibrium in the balance of payments, as a policy goal, and (d) the exogenous variables (for example import prices). Lastly, the political actor and planner in deliberation determined (e) the variables that the government did not wish to alter or could not influence. On the basis of this information, the model could render two things: a set of feasible combinations of instruments for the given goals (a so-called scenario), and a welfare function—a definition of welfare. Given these outcomes, a ranking of the efficiency of the scenarios could be generated based upon an optimum balance of goals and instruments in the context of the established definition of welfare.[163] In this sense, Tinbergen's models tried to achieve what for Frisch was only an ideal: the model could determine the ultimate decision—that is, the most optimal decision—on the basis of the preference of the economic agent.

The development of decision modelling was clearly informed by opposition from policymakers and politicians to the CPB's single scenario forecasts and the simple tables that resulted—as described in section 3.6. The decision models made it easy to quickly render multiple scenarios based on the inputs of different political actors (see figure 3.2). In this manner, the CPB could more easily facilitate the different opinion voices by politicians, policymakers and the unions, economists and business representatives of the SER.[164] Like what Frisch models had envisioned it provided a shared framework for the deliberations within the advisory councils of the government—

only a theoretical issue that could pragmatically be solved in practice, see: Kenneth J. Arrow, "A Difficulty in the Concept of Social Welfare," *Journal of Political Economy* 58, no. 4 (1950): 328–46, https://doi.org/10.1086/256963; H. S. Houthakker, "Het mechanisme der economische politiek," *De Economist* 102, no. 1 (December 1, 1954): 93–98, https://doi.org/10.1007/BF02206042; J. Tinbergen, "Over de theorie der economische politiek," *De Economist* 102, no. 1 (December 1, 1954): 241–49, https://doi.org/10.1007/BF02206057.

163  It should be noted that scenario-based forecasting has a more complex history than the history of decision modelling alone. For further reference, see: Jenny Andersson and Eglė Rindzevičiūtė, "The Political Life of Prediction: The Future as a Space of Scientific World Governance in the Cold War Era," *Les Cahiers Européens de Sciences Po* 4 (December 2012).

164  Klamer, *Verzuilde Dromen*, 58; Kayzel, "A Night Train in Broad Daylight," 350.

thus fostering a consensus culture amongst the social democratic and Christian democratic voices of the post-war cabinets. As one policymaker put it: "With the help of techniques and models [of the CPB] you could indicate what the development is going to be, where the bottlenecks are."[165]

Outside of the CPB, in a series of articles and books, Tinbergen explored in more depth the theoretical possibilities of his models, further shedding light on the theoretical implication of the use of decision models.[166] With the optimal welfare outcomes the decision models provided, Tinbergen started to analyse the decision-making structure of the economy. In other words, he made an assessment on which decisions (in the context of the economy) had to be taken at which level. Already from 1935 onwards, Tinbergen had argued that free enterprise and central planning should not be understood as antithetical, suggesting that both could be combined perfectly well. Decision modelling became another argument for this thesis. In an article written in 1961, Tinbergen starts with the simple observation that even in a capitalist society, not all production is left to privately-owned businesses as, for example, the building of roads is the task of the government.[167] Although essential, there were insufficient market incentives for industries to supply goods and services, such as infrastructure and education, since these products had little direct monetary value, even though their external effect on the wellbeing of an economy was both substantial and indispensable—or so Tinbergen argued, in accordance with the ethically driven economic discourses of the interwar period. A combination of studies—market studies to assess the likelihood of the production of the good or service by private companies, and macroeconomic studies to assess the overall external effects of specific goods on the economy—could learn which industries had to be state-owned and which ones could remain private. The external effect of infrastructure and education would become visible in such a macro-analysis. Tinbergen, namely, believed that a better educated labourer would also be more productive.

---

165 Marie-Louise Bemelmans-Videc, "Economen in Overheidsdienst: Bijdragen van Nederlandse Economen aan de Vorming van het Sociaal-Economische beleid, 1945-1975", Phd-Thesis (Erasmus University Rotterdam, 1984), 376.

166 See especially: Jan Tinbergen, "A Comparative Study of Two Decision Models: Frisch's Model and a Simple Dutch Planning Model," *Econometrica* 19, no. 2 (April 1951): 190–219; Tinbergen, *On the Theory of Economic Policy*; Jan Tinbergen, *Economic Policy: Principles and Design*, Contributions to Economic Analysis 10 (Amsterdam: North-Holland, 1956); Jan Tinbergen, "De Optimale Organisatie van Economische Beslissingen," in *Mededelingen Der Koninklijke Nederlandse Akademie Van Wetenschappen, Afd. Letterkunde*, vol. 7, 24 (Amsterdam: North-Holland Publishing Company, 1961).

167 Tinbergen, "De Optimale Organisatie van Economische Beslissingen," 5.

**Tabel IV. 1.** VERKORTE CONFRONTATIE VAN MIDDELEN EN BEHOEFTEN 1947 [1]), 1948 EN PLANCIJFERS 1949 (in mld gld)

| Middelen | 1947 | 1948 | 1949 | Behoeften | 1947 | 1948 | 1949 |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Nationaal product (tegen factorkosten): | | | | Gezinnen, consumptie . | 9,32 | 10,17 | 10,30 |
| | | | | Bedrijven, netto-investe- | | | |
| van bedrijven[2]) . . . | 9,70 | 10,85 | 11,19 | ringen . . . . . . . | 1,81 | 2,04 | 2,23 |
| van de overheid  . . | 1,58 | 1,43 | 1,42 | Overheid: | | | |
| Kostprijsverhogende be- | | | | netto materiële con- | | | |
| lastingen minus sub- | | | | sumptie . . . . . | 0,82 | 0,80 | 0,81 |
| sidies  . . . . . . . | 0,67 | 1,22 | 1,69 | overige consumptie . | 1,53 | 1,43 | 1,42 |
| Tekort . . . . . . . . | 1,63 | 1,01 | 0,61 | netto-investeringen  . | 0,05 | 0,07 | 0,15 |
| Totaal . . . . . . . . | 13,58 | 14,51 | 14,91 | Totaal . . . . . . . . | 13,58 | 14,51 | 14,91 |

[1])   Voor de verschillen met de cijfers van het C.B.S. zie bijlage II.
[2])   Incl. netto-inkomsten uit het buitenland.

Figure 3.1. "Table IV.i. Abbreviated Confrontation between Means and Requirements" from *Centraal Economisch Plan 1949* (The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1949, 20)

An example of an earlier method of presenting the forecasts of the Dutch economy in the Central Economic Plans. The 'Plan-figures' (plancijfers) contain a forecast of the economy in a scenario where the government was to adopt all the measures that the CPB recommended. These figures are presented in the columns with the heading '1949' (4 and 8). No other forecasts were provided in the table.

Tabel III. 2. OVERZICHT VAN DE VOORNAAMSTE UITKOMSTEN DER ALTERNATIEVEN VOOR 1952

| Omschrijving | Eenheid | 1951 | 1952, alternatieven: | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | I | II | III | IV | V | VI | VII | VIII |
| (1) | (2) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (10) | (11) |
| *Veronderstellingen:* | | | | | | | | | | |
| Aantal werklozen . . . . . . . . | 1000 pers. | 93 | | | | 100 | | | | |
| Invoerprijspeil . . . . . . . . . | 1951 = 100 | 100 | | | 100 | | | | 105 | |
| Buitenlands prijspeil van met Nederlandse export concurrerende goederen . . . . . . . . . . | 1951 = 100 | 100 | | | 100 | | | | 103 | |
| Autonome uitvoerstijging voor goederen . . . . . . . . . . . . | uitvoer goederen 1951 = 100 | | | 5 | | 10 | | 10 | | 15 |
| Netto investeringen van bedrijven incl. voorraadvorming, (in prijzen van 1951) . . . . . . . . . . | mld gld | 2,80 | 2,95 | 2,65 | 2,95 | 2,65 | 3,25 | 2,95 | 3,25 | 2,95 |
| *Uitkomsten:* | | | | | | | | | | |
| Nationaal inkomen tegen factorkosten . . . . . . . . . . . . | mld gld | 16,70 | 17,28 | 17,16 | 17,32 | 17,20 | 17,75 | 17,63 | 17,79 | 17,67 |
| Uitvoer . . . . . . . . . . . . | ,, ,, | 10,80 | 11,81 | 11,77 | 12,19 | 12,15 | 12,36 | 12,32 | 12,74 | 12,70 |
| Invoer . . . . . . . . . . . . | ,, ,, | 10,80 | 11,93 | 11,71 | 12,18 | 11,96 | 12,59 | 12,37 | 12,84 | 12,62 |
| Saldo betalingsbalans, lopende rekening . . . . . . . . . . . | ,, ,, | — | −0,12 | +0,06 | +0,01 | +0,19 | −0,23 | −0,05 | −0,10 | +0,08 |
| Productie per werknemer . . . . . | 1951 = 100 | 100 | 105,7 | 104,3 | 107,4 | 105,9 | 106,7 | 105,3 | 108,4 | 106,9 |
| Reële consumptie . . . . . . . . | 1951 = 100 | 100 | 101,8 | 101,4 | 102,5 | 102,1 | 100,2 | 99,7 | 100,8 | 100,5 |
| Prijsniveau van consumptiegoederen | 1951 = 100 | 100 | 99,0 | 99,2 | 98,1 | 98,4 | 102,4 | 102,7 | 101,6 | 101,8 |

Figure 3.2: 'Table III.2. Overview of the Principle Outcomes of the Alternatives for 1952' from *Centraal Economisch Plan 1952* (The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1952)

This table is a good example of how the CPB presented their forecasts of policy alternatives within one chart applying their decision models, allowing for easy comparison. The upper half of the table contains the economic forecast for the period whilst the lower portion contains the predicted outcomes the economy and the lower half the outcomes. The Roman numerals (I up to VIII) represent the different policy alternatives. As one can see, there are a lot more different options to chose from in the new style of the Central Economic Plans.

Like Frisch, Tinbergen considered the planner and the government to be inherent parts of the mixed economy system. Governments could not intervene in the economy without changing the economic processes significantly. One of the problems that arose from this interconnectedness was the potential difficulty for businesses to adequately respond if consumers altered their behaviour in response to large changes in state-owned industries, such as the railways, post-services or energy sector (still nationalised at the time), since these changes were not market-driven but based on the overall well-being of the economy. An example of this change in behaviour due to public investments would be the change of private savings due to increased consumption. Therefore, Tinbergen argued, it was important to undertake decision making in two steps: first, at the central level, in which the government lays out its investments and expenditure for the coming year in the form of a plan; second, at the level of private companies, businesses had to be given ample time to adjust their own investments in accordance with the plans. The emphasis that Tinbergen places here on both centralised top-down decision making and flexibility mirrored the policymaking practice of the decision models themselves. If business owners, like politicians, could anticipate multiple scenarios and adapt to new situations, planning would be completely compatible with a large private sector and without the danger of creating market disturbances.[168]

However, Frisch had rejected the two-step approach Tinbergen advocated as he felt that there were too many complex interdependences in the system to make an adequately clear time schedule for public and private investments.[169] Conversely, Tinbergen thought that this approach was possible, since he predicted that the interdependence of the economic system would, over time, lead to a convergence of public and private investments—a harmonious whole dictated by the rhythm of economic development. In short, by using central plans, stable patterns could emerge even in the complexity of the whole economy. Delving further into speculations about the future, Tinbergen thought that such convergence could be expedited if the planning bureau could anticipate the actions of private market actors in their own public investment proposals. A model for such an integrated economic plan, Tinbergen suggested, could be the cybernetics of Norbert Wiener, in which each individual actor, whether public or private, anticipated and reacted to

168 Tinbergen, 8.
169 Tinbergen, 15.

each other's actions through a complex web of feedback loops.[170] Like Frisch, Tinbergen saw significant potential in simulation techniques such as those offered by cybernetics and that a new generation of computers promised.

It may appear that the decision models imagined the future in a flexible and more pluralistic manner, as if the course of history was like a "choose-your-own-adventure-book" with governments as its avid readers; unique outcomes of history were possible with each reading of the book. However, in decision models, flexibility and plurality were not imagined as the points towards which political systems were developing. The political system itself was already imagined as flexible and plural, or to be more precise, as dynamic. In other words, flexibility was a feature, not a goal. Tinbergen's and Frisch's dreams of computer simulations and cybernetics attest to this. In Tinbergen's assessment, the decision-making structure was heading towards a point of convergence between private and public interests, between planning and free markets and, as I will argue in the final section, between capitalism and communism—between East and West.

Compared to the models and practices of Frisch, Tinbergen's models make a clear move towards the complete identification of the economic agent with the political agent. Where Frisch stressed the discursive element, both in the workings of the models and in the reaching of agreement, Tinbergen's work contains less such allusions. This absence may at first appear strange given the facilitating role the CPB played within the SER.[171] However, in contrast to the interwar planning ideal and the proposals for economic councils by social democrats (see previous chapter), the SER was more of an elite institution. It was neither the aim of the SER to let average citizens participate in policymaking, nor to form a bridge between civil society and the state. Rather, the SER hoped that cooperation between employers and unions could settle social issues outside of the state.[172] The tools of the plan-

---

170 Tinbergen, 18.

171 Paul Den Hoed, "Een Keur van Raadgevers: Honderd Jaar Vaste Adviescolleges," in *Op Steenworp Afstand: Op de Brug Tussen Wetenschap En Politiek* (Amsterdam: Amsterdam University Press, 2007), 75–90.

172 Weirdly, this point is often missed by Dutch historians, who often paint the founding of the SER as a marriage of Christian democratic and social-democratic ideas, pointing out the similarities between council socialism and corporatism in interwar thought. This oversight of the essential differences between the two political philosophies is most likely due to the national myth of the Netherlands as a historically consensus-seeking nation. See: Klamer, *Verzuilde Dromen*, 27–45; Wilts, "Economie als Maatschappijwetenschap," 103–9; Camphuis, "Tussen analyse en opportuniteit," 36–44. For a critique, see: Merijn Oudenampsen, "The Conservative Embrace of Progressive Values: On the Intellectual Origins of the Swing to the Right

ner were, consequently, not aimed at making policymaking issues accessible to the average citizen, but rather for corporatist representatives to formulate their preference in a more uniform manner. Consequently, an important part of the democratic theory behind planning disappeared.

Yet, even with the use of models, the practice of preference formation was still messy. In order to decide which scenarios to develop in the decision models, a significant number of conversations with policymakers were necessary—similar to how Frisch had stressed that the art of conversations was indispensable for planning.[173] Hence, the process of preference formulation could not be completely automatic.

## 3.9 Henri Theil: The Formation of the Decision-Making Animal

The early simple decision models that Tinbergen had developed at the start of the 1950s were further developed within the CPB by his followers. One such protegee was able to push the theoretical basis of the decision model to a new level. That protegee was Henri Theil. Like many of the first generation of CPB economists, Theil was initially trained as a physicist before moving to economics. He received his PhD in 1951 under the guidance of Pieter Hennipman, one of the most important representatives of the Austrian School in the Netherlands.[174] During his work for the CPB from 1952 to 1957, Theil was noticed internationally for his development of the two-stage *least squares method*—a form of regression analysis especially suited for estimating causal relationships and therefore very useful in econometric analysis. From 1955 to 1956, he visited the Cowles Commission in Chicago, which was led by Tjalling Koopmans, who was also a former student of Tinbergen, and was considered the most important hub for the development of econometrics at the time.[175]

---

in Dutch Politics" (Tilburg: Tilburg University, 2018), chap. 1.

173  On the discursive practice of Dutch planning, see: Bemelmans-Videc, "Economen in Overheidsdienst," 367–512; Klamer, *Verzuilde Dromen*, 127–36; Maas, "Calculators and Quacks," 33–37; Kayzel, "A Night Train in Broad Daylight," 351–52.

174  On Hennipman and his subjectivist school, see: Wilts, "Economie als Maatschappijwetenschap," 127–30.

175  On the importance of the Cowles Commission for the development of economics and one of the main Cold War hubs for the development of instruments of rationality, see: Mirowski, *Machine Dreams*, chap. 5; Till Düppe and E. Roy Weintraub, "Siting the New Economic Science: The Cowles Commission's Activity Analysis Conference of June 1949," *Science in Context* 27, no. 3 (2014): 453–83, https://doi.

With regard to decision modelling, Theil's main innovation consisted of the incorporation of uncertainty assessments into the decision model. This required that the likelihood of the success of a specific economic measure was taken into account when calculating the optimal combination of economic instruments. In other words, measures with a high chance of failure were less optimal and therefore less preferable and *vice versa*. Theil achieved this by making uncertainty part of the agent's preference ranking, which served as an input to the decision models. In short, uncertainty assessments were taken to be imaginary knowledge, on which the political actor was to base his or her decision. Consequently, the model attributed knowledge to the decision maker, which in reality, they often did not possess. This meant that part of the behaviour was not based on the input (or choices) of the politician, but rather was model based—in other words, part of an ideal world. Consequently, to Theil, the model description of the decision-making actor consisted of three parts: one factual (the specific condition under which the choices were made); one behaviouristic (the idealised knowledge of the situation the actor has); and one based on the preferences or utility provided by the actual choices of the actor.[176] Like Frisch before him, Theil introduced a fiction—the "decision-making animal" in his description—to help the real decision makers make their choices more clearly.[177]

Working out his theory on uncertainty and political decisions in his 1958 book *Economic Forecasts and Policy*, Theil relied heavily on the new techniques he had picked up during his stay in Chicago in order to partly model the behaviour of the decision maker. For example, the theory of *bounded rationality* as developed by Herbert Simon was used to model the actor's knowledge about their situation. Simon had modelled the preference function of a rational agent in such a manner that utility was dependent on the amount of information the agent had. Such utility was formalised by Simon in a vector—a mathematical technique that could visualise the space in which a preference could be located.[178] Furthermore, the idealisation of the actor's knowledge was taken to be a "behavioural pattern", meaning a general consistency that could be induced through the behaviour displayed by an agent. In this manner, Theil's understanding of preference was very close to

org/10.1017/S0269889714000143.

176 Henri Theil, *Economic Forecasts and Policy*, Contributions to Economic Analysis, XV (Amsterdam: North-Holland Publishing Company, 1958), 349.

177 Theil, 352.

178 Henri Theil, "Econometric Models and Welfare Maximisation," *Weltwirtschaftliches Archiv* 72 (1954): 60–83.

*revealed preference theory* as developed by Paul Samuelson—one of the most influential US economists of the twentieth century.[179] Contrary to Frisch's research on method of utility, Samuelson believed that the consumer pattern of the economic agent could be explained by an hidden preference pattern. There was therefore no need for complex surveys in order to determine an agent's preferences. If one wanted to know what an agent's preferences were, one only had to observe their consumption behaviour.[180] In the case of decision models, the planner had to observe the choices of the politician in order to know their preferences.

With these new theories of rationality at hand, Theil could take the next step in the development of decision modelling. Both Frisch and Tinbergen had indicated that the difficulty of planning was to incorporate the behaviour of political actors (governments, policymakers, unions, and business representatives) and their influence on the economy into forecasts of the economy on which those very same actors had to act. In other words: How to account for the effects of political action in reaction to the political actions of the government? From this issue flowed the question of how stable patterns could emerge within a complex system. Theil's solution was that which had been suggested, albeit speculatively, by Tinbergen, namely, modelling the behaviour of these political actors and incorporating them into the decision model. So, for example, if the effectiveness of a policy was dependent on the union's willingness to agree with wage moderation, the likeness of the union leaders complying with such measure could be predicted by idealising the union's leaders as completely rational agents in the decision model. Using game theory, Theil could model the policymaking process of economic policy with each actor or party involved acting strategically in accordance with their preferences.[181] John von Neumann and Oskar Morgenstern had developed game theory to mathematically devise strategies in games. Based on poker games, Neumann and Morgenstern theorised that players would only cooperate, or do something in favour of another player, as long as this would be beneficial to both players in the future. If this beneficial relation was to end or was perceived to be ending in the next few rounds of play, players would renege on their earlier commitments.[182] Assuming political

---

179  D. Wade Hands, "Paul Samuelson and Revealed Preference Theory," *History of Political Economy* 46, no. 1 (2014): 85–116, https://doi.org/10.1215/00182702-2398939.

180  Theil, *Economic Forecasts and Policy*, 360.

181  Theil, 189.

182  Paul Erickson, *The World the Game Theorists Made* (Chicago: University Of

and private actors behaved in much the same manner in corporatist politics, the planner could anticipate the reaction of actors, ensuring that businesses, unions, and citizens would comply with central decisions and not back out.

Theil's step is significant, not only for turning his teacher's speculations into an actual model. Theil's coupling of the rational choice theory underlying the decision model with game theory is revealing of the way economic experts conceived of the system's reality in their models. As explained in section 3.4, rational choice theory predicts constantly shifting behaviour patterns when actors enter new uncertain situations. In a dynamic and complex system, actors would therefore constantly change their actions. If the planner wanted a stable economic pattern to emerge, a tool was needed that could render the system at least partly less complex and unpredictable. Frisch thought that a general input-output scheme was such a tool, whilst Tinbergen put his faith in central economic plans as a way to stimulate a system to move towards a more stable form. Theil's tool of choice was game theory. Game theory provided stable strategies for rational actors to use even when faced with new, uncertain situations. It therefore made the actions of rational actors, even in complex and dynamic systems, predictable without the system itself actually becoming more stable.[183] The combination of rational choice theory and game theory was thus the ultimate way of creating stable decision outcomes without undermining the uncertainty of the system. Theil could thus adhere to a complex and unknowable economic system whilst also claiming that reliable economic predictions were possible.

Theil was not the only one working at the CPB at the time who took this step of modelling the political actor into a fully idealised rational economic agent. Willem Drees Jr., who worked for the CPB from 1950 to 1956, wrote his PhD on the development of public finances. By studying the behaviour of actual policymakers in the Ministry of Finance and modelling them in a rational choice framework, Drees argued that public spending was only likely to grow in the coming decades, since it was in the policymakers best interest to have a large governmental apparatus, even if this was against the wishes of the prime minister or parliament.[184] In this manner, Drees' theory was an early variant of *public choice theory* which, although only popularised in the 1960s, described the whole deliberative process of politics as a bar-

Chicago Press, 2015), chap. 2.

183  Joel Isaac, "Strategy as Intellectual History," *Modern Intellectual History* 16, no. 3 (2019): 1010–13, https://doi.org/doi:10.1017/S1479244318000094.

184  Willem Drees Jr., *On the Level of Government Expenditure in the Netherlands after the War*, Aspecten Der Economische Politiek, III (Leiden: Stenfert Kroese, 1955).

gaining process between economic actors, explaining the dynamics of mac-roaggregates, such as public spending, via the behaviour of micro-actors.[185]

Theil's decision theory, even more so than those of Frisch and Tin-bergen, bears all the hallmarks of the tool-based expertise of the Cold War period. Planning did not revolve around turning society or the economy into a controllable system to be steered by the ultimate helmsman. Rather, it revolved around the use of tools that could render parts of the system stable enough that reliable predictions were possible. The effectiveness of interventions, in contrast with the image of the natural sciences, did not de-pend on the scientist's ability to manipulate the system, but rather on tools that could render parts of the system predictable enough for planners, the government, and the state to anticipate the evolution of the system. Planners were therefore far from the sinister technocrats that sought domination over society through the power of the state, nor did they want to turn politics and economics into a completely predictable machine. In short, they did not turn planning into bureaucracy, as their critics might claim. However, the practice of this tool-based expertise had other, significant implications for political deliberations.

## 3.10 Utopia Regained

To briefly recap the argument of this chapter so far: The tools of Cold War rationality helped Dutch planners to imagine democracy and the role of the economic planning in the state apparatus in a drastic new manner. As for their US counterparts, Bell and Easton, the state became a neutral frame-work that transformed individual preferences into effective policy. The focus on the social, or the role of the planner in fostering a (workers') communi-ty, disappeared. In a conceptualisation of modern historicity in particular, linked to the Cold War political climate, ideology or a system of morals and principles cultivated by specific groups in society no longer seemed desirable. The personal normative order appeared as an alternative. Decision models, in particular the kind developed by Thiel, gave an economic interpretation

---

185 Merijn Oudenampsen and Bram Mellink, "The Roots of Dutch Frugality: The Role of Public Choice Theory in Dutch Budgetary Policy," *Journal of European Public Policy* First view (2021), https://doi.org/10.1080/13501763.2021.1936130; Thomas Kayzel, "Towards a Politics of Restraint: Public Choice Theory in the Labour Party of the 1970s," *TSEG - The Low Countries Journal of Social and Economic History* 18, no. 1 (2021): 59–61.

of a democratic society solely consisting of individual citizens. Individual preferences had to be the drivers of democratic change in a political system. The task of the planner was simply to find more stable patterns for the behavioural choices of the individual. In this final section, I want to show how this change in image of society, inherent in the planning tools, had an impact on political deliberation. In addition, I want to briefly point out that—even if Cold War historicity forbade it—planners such as Tinbergen were still thinking beyond the existing political system. As Polak had already argued, utopian visions of the future had yet to inspire political action.

The development of decision theories by Frisch, Tinbergen, and Theil gradually turned political actors into rational, computational, rule-bound, economic actors. In the process, the idealisation of the purely rational self-interested agent was taken increasingly as the reality rather than fiction. The deliberative or conversational element of economic expertise had slowly but surely completely disappeared into the background and was replaced instead by a more behaviouristic approach. Whereas for Frisch economic policy could only be coordinated through actual conversations between politicians, policymakers, unions, and business representatives, in Theil's models this whole process could be avoided by predicting the actions of political actors based on behavioural patterns. In Theil's theory there was no longer a need for interviews with political actors in order to know their preferences, Instead the planner could assume that their preferences were expressed in their behaviour.[186] The distinction between the idealised nature of the *homo economicus* and the actual behaviour of the political actor became increasingly blurred.[187]

Another result of the adoption of the tools of Cold War rationality was that the ideal of the ordered economy, which had been so central to the dreams of a planned economy in the interwar years, changed significantly in favour of free markets and capitalism. Critics of planning, such as Friedrich Hayek and Ludwig von Mises, thought that the vital flaw in planning theories was their optimism about the knowability of the economic system.

---

186 It should be stressed, however, that Theil's theory remained largely a theory. The actual practice of planning was still based on conversations between planners and policymakers. See: op. cit. n. 143

187 An analysis of the full implication of this transformation is laid out in: Wendy Brown, *Undoing the Demos: Neoliberalism's Stealth Revolution* (New York: Zone Books, 2015). Brown strongly links this development to the rise of neoliberalism. As I have showed above, neoliberalism only played a small role in this transformation in the Netherlands. It should furthermore be noted that Brown's conception of democracy is rather one-sides, mostly relying on the definition given by Arendt.

By imaging the economy through cybernetic models as both complex and uncertain, planners in the post-war period basically conceded to this criticism.[188] They thought this did not matter—Frisch and Tinbergen continued dreaming about a completely planned economy—for planning could still create stable and predictable patterns in a chaotic system of markets by applying tools based on new notions of mechanical rationality.[189] However, making the economy more ordered slowly disappeared from the planning agenda when rational choice was combined with game theory. Even an unordered economy could be planned if the planner was to supply political and economic agents with stable strategies. Turning unstable free markets into state-led enterprises was thus no longer necessary. Their negative effects could be tempered by the state through non-interventional means. Capitalism could continue in its "merry old way" without the burden of planning. Such an ideal of central planning was particularly pertinent for the Cold War years in Western Europe where a strong consensus between liberals, Christian democrats, and social democrats formed about a capitalist welfare state, where economies were managed by states, but with no actual changes in the ownership of property and means of production.[190]

It would be wrong, however, to assume that planners had given up on thinking beyond the capitalist system. As Tinbergen's ideas on a converging economy already suggested, the idea of an economy that was neither capitalist nor communist was still on the planners' mind. The interwar faith in modernity changing the economic institutes beyond chaotic free markets was very much alive. However, Tinbergen transposed these radical hopes away from Dutch politics and into the sphere of international affairs.

Tinbergen was director of the CPB from 1945 to 1955, and his theoretical work from that period is strongly tied to the activities of the bureau, as became clear in the fourth section. Afterwards, he turned his attention to more international issues. In 1951, on a trip to India, Tinbergen came face to

188  Frisch, Tinbergen and Theil were not the first to do so. The roots of this development can be traced back to the writings of Oskar Lange on market socialism in the 1930s. See: Johanna Bockman, *Markets in the Name of Socialism: The Left-Wing Origins of Neoliberalism* (Stanford, CA: Stanford University Press, 2011); Philip Mirowski and Edward Nik-Khah, *The Knowledge We Have Lost in Information: The History of Information in Modern Economics* (Oxford; New York: Oxford University Press, 2017), chap. 5.

189  This argument is fully made in: Mirowski and Nik-Khah, *The Knowledge We Have Lost in Information: The History of Information in Modern Economics.*

190  This is why Amadae suggests that rational choice theory was an ideological device for justifying liberal capitalist democracy. Amadae, *Rationalizing Capitalist Democracy.*

face with the poverty-laden developing economies of the newly decolonised countries. In his own account, "[a]lthough in Holland we had been hungry during 1944–45, the last winter of the occupation of Hitler's army, the poverty prevailing in India—as a normal situation—was such a contrast that it redirected my thinking and main activities."[191] In 1955, he would take on a professorship in Rotterdam especially focussed on development economics, and in 1956, he would work for the United Nations, advising developing economies. During this period, he started to theorise the emergence of a global economic order, an integrated international economic system with the aim of creating economic conditions beneficial to all nations.[192]

Building upon the work he had done on decision modelling for the CPB, Tinbergen investigated the optimal organisation of economic decisions on a global level, that is to say, which decisions had to be taken on a central, global scale, and which decisions could be left to national politics, or to the individual sectors, businesses, or citizens.[193] As with the model he devised for the Dutch economy, the model system of the levels of decision-making did not make a clear distinction between capitalist or communist economic or political systems. Most countries had opted for a mixed system that made hard distinctions unnecessary, and Tinbergen believed that, in time, the two systems would converge: Predominant capitalist systems would introduce more economic planning, whilst communist systems would gradually introduce more decentralised decision making. As he wrote for *Socialism and Democracy*: "[T]he Russians might realise [...] that less centralization in economic management is a more efficient and socially more acceptable mode of production than fully centralized."[194]

Tinbergen's convergence thesis was not only a scientific thesis; it was also a normative thesis about the direction the world had to take to secure world peace and counter global poverty (it was in that sense a continuation

---

191 Marcel Boumans and Neil de Marchi, "Models, Measurement, and 'Universal Patterns': Jan Tinbergen and Development Planning without Theory," *History of Political Economy* 50, no. S1 (2018): 237, https://doi.org/10.1215/00182702-7033956.

192 Erwin Dekker, "The Construction of an International Order in The Work of Jan Tinbergen," in *Political Economy and International Order in Interwar Europe*, ed. Alexandre M. Cunha and Carlos Eduardo Suprinyak (Cham: Palgrave Macmillan, 2020), 130.

193 See especially: Jan Tinbergen, "The Theory of the Optimum Regime," in *Economic Models, Estimation and Risk Programming: Essays in Honor of Gerhard Tintner*, ed. Karl A. Fox, Jati K. Sengupta, and G.V.L. Narasimham (Berlin / Heidelberg: Springer-Verlag, 1959), 133–89.

194 Jan Tinbergen, "Internationale socialistische politiek," *Socialisme en Democratie* 14, no. 11 (November 1957): 669.

of the mixing of scientific and political personas he had cultivated in the interwar years). The crucial question for Tinbergen was: Who was to take the crucial decision to inaugurate the new global economic order of peace and economic equality? Planners in the Cold War conception could only provide the tools for intervention and not take the decision on their own. Not much was to be expected from the leaders of industrialised nations either. The conditions of many economies were as such that protection measures seemed the most attractive for national economies.

The only actors left were the developing countries. For them, there was still a crucial decision to make, namely whether to adopt a capitalist or a socialist system. However, if the only options available were capitalism and communism, no stable equilibrium between the two superpowers would be reached and the political system would not converge. Instead, a third choice had to be available in order to reach stability. This third option, Tinbergen thought, was a mix between capitalism and socialism—a social democracy as he envisioned it. However, how could Western planners persuade developing nations to go for the third option? Advising developing countries as Tinbergen himself did was one option, yet it was also crucial that the attractiveness of the third option was shown in practice—by setting an example of what was possible. To that end, Tinbergen argued, Western Europe had to adopt a mixed-economy.[195]

This led Tinbergen, after some initial hesitation, to embrace the idea of European collaboration in the European Economic Community (EEC). It was not so much the EEC's actual international power that could convince developing countries to choose a third alternative. Instead, it was the EEC's power to show the possibilities of how such a mixed economy could be achieved in an international setting.[196] Tinbergen's expertise with regard to the global economic order was therefore not one of supplying the tools to governments for the establishment of stable patterns, but rather, planning tools acted to enhance the leadership potential of the EEC.

The planner's task to promote the establishment of stable patterns in the existing political system was not only aimed at establishing a dynamic equilibrium. It also pointed towards a goal that lay beyond the wellbeing of

195 Jan Tinbergen, "Europe and the World," in *Sciences Humaines et Intégration Européenne*, ed. Hendrik Brugman, Ladislav Cerych, and M.J. Lory (Leiden: A.W. Sythoff, 1960), 379–85.

196 Jan Tinbergen, "The Impact of European Economic Community on Third Countries," in *Sciences Humaines et Intégration Européenne*, ed. Hendrik Brugman, Ladislav Cerych, and M.J. Lory (Leiden: A.W. Sythoff, 1960), 386–98.

national economies—a goal bound up with utopian dreams of global peace and equality. If the ideological progress of Cold War historicity was without agent, as Arendt and Shklar had argued, Tinbergen's utopia provided an outlook on the future in which history once again had an agent in the form of the developing nations, but also the industrialised nations that could lead by example. In that sense, the tools of Cold War rationality provided a way to think beyond individuals as the only relevant historical actors and instead give states a prominent role.

## Conclusion

The intellectual developments of the first two decades after the Second World War significantly challenged the modern conceptualisation of historicity. It seemed that the most detrimental characteristic of modernity—its propagation of rule-bound rationality—had taken the upper hand. Moreover, no communal morals or principles remained to counterbalance the destructive effects of modernity. The progress of modernity became empty, devoid of any agent that could steer modernity in a positive direction—to act upon its promise of emancipation and equality. Although, many critics of modernity, such as Löwith, Arendt, and Shklar, abhorred the emptiness of progress, they were never able to escape the idea that the horizon of the development of history was provided by progress. In that sense, they remained ultimately very modern in their conception of historicity.

   To return to the original question that opened this chapter: Why did planners embrace rule-bound rationality if they had in an earlier stage rejected it? Part of the answer, as many historians have pointed out, is that rule-bound rationality provided a positive ideal against the danger of totalitarian ideology. Modern individuals might be alienated, but they were also able to resist the irrationality of the masses. Moreover, rule-bound rationality provided a justification of the post-war political constellation in which broad coalitions embraced free-market initiatives and social policies. This chapter has added a third answer: Rule-bound rationality in its Cold War application provided planners with the means to create an image of democratic politics in which the horizon for political action was no longer formed by a radical new future of progress, but by a system that would become more stable over time. Such a vision of politics still provided the space to create utopian visions of the future.

   The adoption of Cold War rationality tools not only had effects on how

planners imagined the future, but also changed the decisionist imaginary. Although the nightmarish vision of a bureaucratic state still loomed large amongst the critics of economic planning, the state, with the help of rule-bound rationality, was reimagined as a neutral framework. There was still a "power elite," but it could become a democratic elite if it could transform the preferences of the different interest groups of society into effective policies. Similarly, democracy started to revolve around the preferences of individuals that could be aggregated into collective preferences for a given policy. This meant that ideology, or a set of principled convictions, became obsolete vehicles for collective political action. Ideology also disappeared from political deliberation. In a consensus culture, political parties could no longer be hindered by principles. The idea that politics revolved around ideological clashes suddenly seemed rather outdated.

Guiding this new politics of the individual were the new tools of the economic planner—the ultimate devices via which to transform preferences into policy. The planner was an entrepreneur, someone who sold their tools to a government who could use them to establish more stable patterns in society. This tool-based expertise was more democratic than its critics made it out to be, yet it also brought to an end, albeit not completely, to the most overtly idealistic elements of economic planning. Tinbergen and Polak still continued to produce their utopian vision of society. As will become clear in the next chapter, their dreams were precursors to the return of idealistic politics in the second half of the 1960s.

# CHAPTER 4.

# A Labyrinth of Movement:
## A Radical New Horizon of Expectation, 1965-1975

> *Today, when time is filled with significant action and history gathers speed so rapidly that man is left behind, even though it is he who accelerates it, there is indeed an urgent need to analyse the basic conceptions of time and history prevalent in different cultures […]. We are concerned not so much with a comparative analysis as with the effect on a diversified typology of what is becoming increasingly a whole and all-embracing history, sweeping on and ineluctably synchronizing different periods of time as they are variously experienced*
>
> —UNESCO, *Development of Philosophy in the Contemporary World: Time and History* (1971)[1]

> *Prepare for unforeseen consequences.*
>
> —The G-Man in *Half-Life 2: Episode Two* (2006)

## Introduction

For Hannah Arendt, the problem of historicity in the 1950s was the absence of a gap between past and future. She illustrated what the positive ideal of

---

1 *Development of Philosophy in the Contemporary World: Time and History*, June 22–24, 1971 (meeting), Report, UNESCO Archives, SHC/WS/194, August 5, 1971 cited in: Dan Edelstein, Stefanos Geroulanos, and Natasha Wheatley, "Chronocenosis: An Introduction to Power and Time," in Power and Time: Temporalities in Conflict and the Making of History (Chicago: University of Chicago Press, 2020), 1.

such a gap was by using an example from the *Odyssey*. Odysseus, a guest to the court of King Alcinous, is moved to tears when he hears how the bard Demodocus narrates his trials and tribulations in the Trojan War. According to Arendt, his tears stem from the realisation that his current state is so far removed from his past affairs: "What had been sheer occurrence now became 'history.'"[2] Odysseus reflected on the man he was, how he had changed, yet remained the same person. This was the gap between past and future; it opened up a space in which the past was transformed into stories, into history. It allowed for the authorship Arendt sought. "[T]he 'reconciliation with reality,' the catharsis, which, according to Aristotle, was the essence of tragedy, and, according to Hegel, was the ultimate purpose of history, came about through the tears of remembrance."[3] Odysseus, the author of his own life, had to establish his authority as a person in the present by weaving together the stories of the past—by integrating his past self into the future.

However, what if the gap between past and future becomes too wide? What if Odysseus could not recognise himself in Demodocus' stories? What if the consequences of his past actions had grown beyond his identity in the present? What if he was no longer able to integrate his past self into his project for the future? What if catharsis was impossible? In the same way Arendt had considered the gap between past and future lacking in the 1950s, Reinhart Koselleck formulated the modern predicament in diametrically opposed terms two decades later. In modernity (*Neuzeit*), he argued, "the gap between past and future become[s] greater,"[4] enlarged to such an extent that humankind had no idea how to relate experiences of the present to the expectations of the future.

In this chapter, I want to argue that the emergence of a wide gap between past and present was precisely what characterised an experience of time prominent in the second half of the 1960s and first half of the 1970s. This experience was driven by the expectation of immense long-term problems that potentially threatened to destroy human societies, civilisation, or even humankind altogether. The depletion of energy sources, environmental pollutions, the extinction of species, and global food crises were all problems of a magnitude never encountered before. In the face of such challenges, the

---

2 Hannah Arendt, "The Concept of History: Ancient and Modern," in *Between Past and Future: Six Exercises in Political Thought* (New York: Viking Press, 1961), 45.

3 Arendt, 45.

4 Reinhart Koselleck, "'Space of Experience' and 'Horizon of Expectation': Two Historical Categories," in *Futures Past: On the Semantics of Historical Time* (New York: Columbia University Press, 2004), 270.

experiences of both the past and the present seemed utterly useless.

What made these future problems even more alarming was that they seemed to be the result of post-Second World War modernisation and the exponential economic growth it had triggered. "Economic growth" had been the key word guiding the post-war, consensus-driven politics of industrialisation and social security. For a brief decade, growth seemed to be the answer to all of the world's problems, solving issues such as unemployment, inflation, and poverty that had haunted the interwar years. As described in the previous chapter, the complacency of economic growth concurred with a feeling of "the end of ideology" and turned progress in a totalising and meaningless notion. However, by the start of the 1970s, growth was suspected of being the cause of all the woes of industrialised nations. Not only did the increase in productivity deplete the earth's resources and cause pollution on a massive scale, social unrest, individualisation, counterculture, and ever increasing bureaucracies could also be attributed to economic growth.[5]

As mentioned in section 1.3, many recent studies, for example those of François Hartog, Aleida Assmann, Zoltán Boldizsár Simon, and Jenny Andersson, have made the case that in the second half of the 20th century, a new conception of historicity emerged, constituting a break with the modern notion. I would suggest that if such a break occurred, it should be located in the second half of the 1960s. Although the above-mentioned authors reference the Second World War and the atomic bomb as the instigators of this new conception of historicity, I consider the immense, looming, problems of the future—those formulated in *The Limits to Growth* (1972) by the Club of Rome of overpopulation and environmental disaster—more likely reasons. *The Limits to Growth* was the clearest visible formulation of problems that led up to the notion of the Anthropocene, which is often taken as the expression of this new notion of history.[6]

In contrast to the authors above, I consider the difference between the modern conception of historicity and what came after it to be not as stark as some might suggest. Reference to a singular horizon of progress—what Koselleck considered the defining feature of modern historicity—did not disappear from the collective imagination, even if singular progress became problematic in new ways. Authors such as Andersson suggest that econom-

---

5 Matthias Schmelzer, "The Crisis before the Crisis: The 'Problems of Modern Society' and the OECD, 1968–74," *European Review of History: Revue Européenne d'histoire* 19, no. 6 (2012): 999–1020, https://doi.org/10.1080/13507486.2012.739148.

6 Dipesh Chakrabarty, "Anthropocene Time," *History and Theory* 57, no. 1 (2018): 5–32, https://doi.org/0.1111/hith.12044.

ic planning remained largely loyal to its earlier modernist convictions and that this new experience of time was primarily expressed within new social movement and a new class of scientific experts—futurologists and renegade planners.[7] In this chapter, discussing in more depth the case of the CPB and wider Dutch discourse on social planning, I want to show that even mainstream state planners did not escape this new emergent mode of historicity unscathed.

Analysing this shift in historicity which, I argue, was characterised by a radical new horizon of expectation, I will continue my discussion of scholars who addressed the nature (or philosophy) of history and time from the previous two chapters. In order to widen the context, I will start this chapter by discussing two West German scholars: Koselleck and Habermas.[8] In the second section, I will discuss again the works of Koselleck—this time, as a historical rather than as a purely theoretical actor—showing how a radical, open future could still be guided by a singular notion of progress. I will do the same for the works of Jürgen Habermas in the third section, showing how long-term prognoses undermined the objective ideal of planning. By no means do I wish to suggest that these are the only relevant authors (in both the West German and Dutch contexts). They are, however, important witnesses to the intimate relationship between discussions on planning and those on the state and civil society (something less thematised in Dutch discourse). I will start by discussing what it was that initially motivated long-term planning by analysing discussions in the Organisation for Co-operation and Development (OECD) which, for the first time, made the large-scale problems of the future tangible.

The radical open future cannot be seen as separate from the rise of the New Left and many other new social movements that strove for civil rights, feminist, and environmental causes in the 1960s.[9] Not only was social unrest one of the experiences which led to the changing horizon of expectation,

---

7 Jenny Andersson, "The Great Future Debate and the Struggle for the World," *The American Historical Review* 117, no. 5 (December 2012): 1414, https://doi.org/10.1093/ahr/117.5.1411.

8 I speak specifically about the *West* German context since these two thinkers were not only influenced by a longer tradition of German philosophy but also reacted to issues specific to the post-World War Two politics of the Federal Republic of Germany, such a de-Nazification and the formation of the "Grand Coalition" between Christian and Social democrats in 1966. For more on this specific context, see: A. Drik Moses, *German Intellectuals and the Nazi Past* (Cambridge: Cambridge University Press, 2007), chap. 2.

9 M. Klimke and J. Scharloth, eds., *1968 in Europe: A History of Protest and Activism, 1956–1977* (New York: Palgrave Macmillan, 2008).

moreover with a radical, open future, there was space for individuals and groups alike to escape the singular all-encompassing march of progress and to formulate their own visions of the future instead. What occurred was a democratisation of time in which the future became more plural.[10] In this chapter, I will argue that the emerging socio-economic planning adhered partly to this call for democratisation and emancipation, yet still sought ways to synthesise the different visions of the future into a single political programme. In this way I hope to dispel the idea that state planners were mere technocrats that simply pretended to have the best knowledge available to tackle the problems of the future. In the Netherlands there emerged a discourse in which planning and democratisation intersected—characterised by the sociologist Jan-Willem Duyvendak as the *planning of emancipation*.[11] Planning for a singular vision of the future was still legitimate, as long it stimulated different groups in society to find self-expression for their own visions of the future. The development of this new planning ideal is the focus of the fourth section.

   To show how this new planning ideal of emancipation was put into practice, the fifth and sixth sections analyse once more the technical details of specific planning models—as demonstrated in two examples, a futurist model and a system dynamics model. These case studies allow me to show the lasting legacy of the new planning ideal and its underlying conception of historicity. It will also reveal some of the shortcomings of the social planning ideal. Duyvendak argues that these shortcomings were caused by the inherent tension between the democratic and the planning ideals that were brought together in the planning of emancipation.[12] The marriage between top-down state planning and the bottom-up politics of new social movements was not a happy one and was destined to fail. Yet despite its eventual demise, I will argue in the final section that the ultimate failure of social planning to live up to its ideal was more a product of how the planning of emancipation was conceptualised in the models of the CPB.

---

10 Aleida Assmann, *Is Time out of Joint?: On the Rise and Fall of the Modern Time Regime*, trans. Sarah Clift (Ithaca: Cornell University Press, 2020), 217–20.

11 Jan Willem Duyvendak, *De Planning van Ontplooiing, Wetenschap, politiek en de maakbare samenleving*, Nederlandse Cultuur in Europese Context, monografiëen en studies 15 (The Hague: Sdu Uitgevers, 1999).

12 Duyvendak, 104–6.

## 4.1 How "The Future" Became a Thing

Before discussing how a radical open future impacted planning discourse, it is important to understand how such a new horizon of expectation emerged in the first place. How did the colossal problems of the future that so altered the conception of historicity first become tangible? Planning played an important role in the opening up of a radical open future in the second half of the 1960s. It was through the development of new long-term prognostic tools that the future dangers of overpopulation, environmental pollution, violent political clashes, and depletion of energy sources became visible. In this section I will briefly discuss these new prognostic tools and show how, by using such techniques, new issues arose. I want to make two main points: First, what set this new generation of planning tools apart from their predecessors was their ability to integrate data and theory from a variety of scientific disciplines into one forecast. Consequently, there was a emphasise on the interdependence of developments that had (or would) caused the future-shattering events. Second, since future issues were conceptualised as consequences of long-term economic growth, economic planning—as one of the driving forces of that economic growth—became itself suspect.

Before it was radically broken open in the late 1960s, "the future"—as an object of study and imagination—had already garnered much attention at the start of the decade. The RAND corporation was a military think tank that was also important in the development of the other tools of Cold War rationality (discussed in the previous chapter). These tools included, amongst others, game theory, rational choice theory, and cybernetics.[13] Scientists such as Herman Kahn and Olaf Helmer already loudly proclaimed that the future had become a real object of knowledge, not just speculation—acknowledged via the emergence of "the kind of massive data processing and interpreting capability that, in the physical sciences, created the breakthrough which led to the development of the atomic bomb."[14] Indeed, the future was booming.

The planning techniques discussed in the previous chapter, such as the decision model, also had prognostic abilities, albeit usually not looking further than a few years into the future. Everything beyond this was considered little more than the extrapolation of present patterns, rather than the prediction of the possible emergence of new patterns. In contrast, the techniques

---

13  Paul Erickson et al., *How Reason Almost Lost Its Mind: The Strange Career of Cold War Rationality* (Chicago: University of Chicago Press, 2013), 10–17.
14  Olaf Helmer, "Science," Science Journal 3, no. 10 (October 1967): 49–51, cited in: Andersson, "The Great Future Debate," 1411.

that had made Kahn and Helmer so exuberant had the ability, not only to forecast half a century into the future, but also to integrate technological development, social change, and environmental factors into economic and political systems. There were, however, also continuities with the previous generation of planning models. Like the techniques discussed in the previous chapter, these long-term and integrative techniques were initially developed with military purposes in mind, reflecting the conflict between the United States and the Soviet Union. Moreover, relying on the same rule-bound rationality, they smoothly integrated other techniques, such as game theory and cybernetics.

Three of the techniques research and/or developed by RAND that paved the way for long-term forecasting tools were operations research and the Monte Carlo method. Operations research originated in the coordination of US military supply chains in the Second World War and was further developed to coordinate the Berlin Airlift, in which rations were dropped into the enclave of West Berlin.[15] Operations research was an optimisation tool, and the researchers of RAND were initially interested in its ability to calculate the optimal distribution of resources on the battlefield. One application of operations research developed by RAND was the so-called 'Jeep problem' of 1946.[16] Seeking optimal locations for fuelling stations in the deployment of a Jeep offensive, operation research was developed to account for the constant flux of a moving battalion, shifting the fuelling stations in sync with the advancing frontline. Later, a similar application was developed for the deployment of nuclear missiles.[17] In this latter instance, operation research was used to account for constant changes in the deployment of Soviet missiles launch stations, as well as advancements in missile technology that constantly increased their range.

The problems initially addressed by operations research were initially spacial—those of range. However, one of the most prominent RAND scientists, the nuclear physicist Kahn, recognised that range could easily be transformed into a temporal dimension. As ever larger spacial dimensions were covered by the development of operation research, so too did the method become more suitable for estimating changes in military organisation over long periods of time. Combining operations research with game theory,

15 Erickson et al., *How Reason Almost Lost Its Mind*, 51–67.

16 Jenny Andersson, *The Future of the World, Futurology, Futurists, and the Struggle for the Post-Cold War Imagination* (Oxford: Oxford University Press, 2018), 83.

17 Jennifer Light, *From Warfare to Welfare: Defense Intellectuals and Urban Problems in Cold War America* (Baltimore: The Johns Hopkins University Press, 2003), 39–41.

Kahn produced long-term forecasts for the nuclear arms race, arriving ulti-mately at the alarming conclusion of either total nuclear Armageddon, or a perpetual stalemate in which none of the superpowers dared to use their nu-clear arsenal for fear of annihilation. Kahn was incredibly controversial for his forecasts and served as an inspiration for Stanley's Kubrick's film char-acter Doctor Strangelove and his euphonious "doomsday device."[18] Thus, one potentially earth-shattering event—that of all-out nuclear war—already loomed large on the horizon of expectation well before the future was bro-ken open by other immense future problems.

In his nuclear war forecasts, Kahn also employed another technique, known as the Monte Carlo method, originally developed by Oskar von Mor-genstern and Franz Neumann (who also developed game theory) in the con-text of the investigation of neutron diffusion.[19] Monte Carlo was a simula-tion method in which a random generator is used to produce a vast set of possible outcomes—in other words, a simulation of stochastic processes. It could consequently be used for the brute-force calculation of the solutions to optimisation problems and probability distributions. As Peter Galison put it, it was a tool incredibly well suited for "a mode of inquiry to address prob-lems too complex for theory and too remote from laboratory materials for experiment."[20] As the future was dependent on a complex set of causes that could not be addressed by a single theory alone and the future as a non-ex-isting object ruled out knowledge on the basis of experiments, the Monte Carlo method was well-suited for arriving at a prognosis. Future scenarios, in which the complexity of factors yielded too many options about which to make a rational decision, could be turned into probabilities with the use of this method. After his controversial writings on nuclear war, Kahn employed the same methods to discuss further future scenarios across all aspects of society, especially focussing on technological development. In 1967, Kahn published *The Year 2000*. The book contained (in hindsight) fantastical pre-dictions of human hibernating machines and the use of nuclear power in the mining industry, but also a remarkable prescient prediction on the emer-gence of a global communication network across which information could

---

18 Sharon Ghamari-Tabrizi, *The Worlds of Herman Kahn: The Intuitive Science of Thermonuclear War* (Cambridge, MA: Harvard University Press, 2005), chap. 3.
19 Peter Galison, "Computer Simulations and the Trading Zone," in *The Disunity of Science: Boundaries, Contexts, and Power.*, ed. Peter Galison and David J. Stump (Stanford, CA: Stanford University Press, 1996), 118–57.
20 Galison, 119.

be exchanged at the speed of light.[21]

Within the offices of the OECD, these techniques were introduced as forecasting tools by Erich Jantsch who worked as consultant for the organisation from 1965 onwards.[22] They proved in particular usefull for the OECD to forecast environmental and social issues. To understand where these issues came from it is important to briefly consider the history of the organisation itself. The OECD was the successor of the Organisation for European Economic Co-operation (OEEC), which was set up to coordinate the distribution of the European Recovery Fund—also known as the Marshall Plan. The fund was a system of foreign aid provided by the United States to war-torn Europe. One of its main achievements was the standardisation of the national accounting framework used in the distribution of the Marshall Plan.[23] In 1961, the OEEC became the OECD—a collaboration between developed nations, including the United States and later Japan. In its new guise, the OECD was instrumental in pushing for Keynesian inspired demand management policies and economic growth, expressed in terms of gross domestic product (GDP) as the main indicator for the welfare of a nation (which was based on the framework of national accounting developed by the OEEC).[24] The OECD promoted the idea that large economic growth allowed for full employment and the absence of economic downturns, whilst retaining the free exchange of goods and services. It was a programme that could be embraced by social democrats, Christian democrats, and liberals alike. In this way it was hoped it might foster "grand coalitions" between political opponents, like those that occurred in Germany in 1966 and in the Netherlands in 1946.[25]

However, in the 1960s, it became clear to the policymakers within the OECD that economic policies alone were not sufficient to tackle all of the problems facing developed nations. What initially spurred the broadening of the scope of its economic growth policies was the launch of the Sputnik satellite by the Soviet Union in 1957. The United States in particular were

21 Rein de Wilde, *De voorspellers: een kritiek op de toekomstindustry* (Amsterdam: Uitgeverij De Balie, 2000), 60–64.

22 Erich Jantsch, *Technological Forecasting in Perspective: A Framework for Technological Forecasting, Its Techniques and Organisation* (Paris: Organisation for Economic Co-operation and Development, 1967).

23 Matthias Schmelzer, *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm* (Cambridge, UK: Cambridge University Press, 2016), 85–117.

24 Schmelzer, 114.

25 Matthew G. Specter, *Habermas: An Intellectual Biography* (Cambridge, UK: Cambridge University Press, 2010), 106–9.

unsettled by what seemed to be the lead the Soviets had in the space pro-
gramme. It made the US government realise that technological development
had to go faster if Western nations were to compete with the Soviets.[26] Just
after joining the OECD in 1961, the United States put these concerns to the
European policymakers in terms of a new economic modelling technique:
*neoclassical growth modelling.*

Growth modelling had been the suppositious child of neoclassical eco-
nomics, which had its focus towards the macroeconomic forces underlying
national accounting and demand management. The US economist Robert
Solow put the topic firmly back on the map when he connected long term
economic growth with technological development.[27] Solow calculated that
increases in economic productivity were caused by the increased importance
of capital goods in the production process itself. This change, often dubbed
the "Solow-residual," could be explained by machinery becoming more re-
fined and productive over time—the advancement of technology.[28] When
Solow, together with the prominent US economists Walter Heller and James
Tobin, brought his model to the OECD headquarter in Paris, the message
was clear: If the OECD wanted to stimulate economic growth, it had to stim-
ulate technological development.[29] Solow's model was a long-term model
and consequently a second effect of its introduction in the OECD was that
it provided the organisation with a future outlook far beyond that which the
earlier macroeconomic could provide.

The obvious question that arose was how technology innovation could
best be boosted. Scientific and educational advancements seemed obvious
candidates, and the OECD started to develop science and education policies
for its member states to implement. Jan Tinbergen developed the OECD's

---

26 David A. Hounshell, "The Medium Is the Message, or How Context Matters: The
Rand Corporation Builds an Economics of Innovation, 1946–1962," in *Systems, Ex-
perts, and Computers: The Systems Approach in Management and Engineering, World
War II and After*, ed. Agatha C. Hughes and Thomas P. Hughes (Cambridge, MA:
The MIT Press, 2000), 255–310; Audra J. Wolfe, *Competing with the Soviets: Science,
Technology and the State in Cold War America* (Baltimore: Johns Hopkins University
Press, 2013).

27 For a history of Solow's growth model and its political context, see: Verena Hals-
mayer and Kevin D. Hoover, "Solow's Harrod: Transforming Macroeconomic Dy-
namics into a Model of Long-Run Growth," *The European Journal of the History of
Economic Thought* 23, no. 4 (January 2015): 561–96, https://doi.org/10.1080/09672
567.2014.1001763.

28 Robert M. Solow, "Investment and Technical Progress," in *Mathematical Methods
in the Social Sciences* (Stanford, CA: Srandord University Press, 1960).

29 Philip Mirowski, *Science-Mart: Privatizing American Science* (Cambridge, MA:
Harvard University Press, 2011), 69–75.

first economic models for education in 1964, arguing, in line with his earlier thoughts, that a more educated worker would yield more economic productivity. Within this programme, Tinbergen worked out new schemes for how governments could stimulate the general education level of its population.[30] In this manner, the management of economic growth started to encompass more aspects of society than economic activity alone. Planning had to be employed, not only with regard to economics, the OECD suggested, but also with regard to science, education, and culture.[31] This broader vision of economic growth gained a whole new dimension when the Paris student riots of May 1968 broke out. The rioters built their barricades quite close to the OECD's headquarters, and the insurrection troubled the policymakers immensely. An internal note declared: "[T]he hippies, the tendencies towards anarchy in youth groups, the sex explosion and rapid change in moral standards and religious thinking all may be the more pressing and alarming aspects of our modern society."[32] The focus on economic growth and technological development had completely overlooked these other social developments.

Society had changed. A new generation with new political ideologies had emerged that was not afraid to use violence in the pursuit of its aims. The fact that the OECD, in its long-term forecasts, had completely overlooked this development was soon addressed by a research group that dubbed itself the "problems of modern society". The group was led by the British physicist Alexander King, then head of the OECD Scientific Affairs department, together with the secretary of the OECD, the Danish politician, Prof. Thorkil Kristensen. They asked Jantsch to join them, who brought RAND's forecasting techniques to the table, understanding the social problems of the younger generation as intrinsically part of the economic development of the industrialised member nations of the OECD. For inspiration they read books such as Kenneth Galbraith's *The Affluent Society* (1958) and Ezra Mishan's *The Cost of Economic Growth* (1967). Another part of the investigation was the newly emerging issue of environmental pollution, similarly seen as part of the problem-matrix of modern societies. By that time, Rachel Carlson's *Silent Spring* (1962) had made clear that environmental pollution could be

---

30 Pedro Teixeira, "Early Interest, Lasting Scepticism: The Views about Education at the OECD," *Oeconomia* 9, no. 3 (September 2019): 559–81, https://doi.org/10.4000/oeconomia.6641.

31 Benoît Godin, "The New Economy: What the Concept Owes to the OECD," *Research Policy* 33, no. 5 (2004): 679–90.

32 Cited in: Schmelzer, "The Crisis before the Crisis," 1004.

understood as a side-effect of economic growth.[33]

The analysis King, Kristensen, and Jantsch arrived at framed inter-generational and environmental issues as a shift in social patterns that had been caused by unprecedented post-war economic growth. Under the influence of mass consumption, made possible by economic growth, a new generation had developed norms and values wholly distinct from their parents. Consumption culture made subcultures possible in which new norms on sexuality and religion were fostered. This generation gap caused tensions, of which violent uprisings were a result. Together with environmental pollution, these changes in social patterns were grouped under the notion of "the unforeseen side-effects of exponential economic growth."[34] Building on the integrative form of long-term planning that the RAND modelling techniques provided, they concluded such a problem was caused, in the longer term, by the interdependency of social, environmental, and economic factors. Moreover, the group realised that the reason the OECD had originally missed these problems was specifically because they were long-term consequences of economic growth: The organisation had paid too little attention to the effects of this growth, which only became visible on larger timescales. These were consequences that even Solow's models could not foresee—problems that only became visible with the planning tools of RAND.

In 1968, to further develop their problem-complex, King, Kristensen, and Jantsch met up with the Italian industrialist Aurelio Peccei, who had made a name for himself as a government advisor and was deeply concerned with the wider social issues of the time.[35] They would eventually form the so-called "Club of Rome", named after the place where their first meeting took place. As described by Matthias Schmelzer, during their second meeting in Bellagio, the Club of Rome agreed on four tenets of what they called "world problems," which would set out their agenda for the decade to come.[36] These tenants framed the complex matrix identified by King, Kristensen, and

---

33  Schmelzer, *The Hegemony of Growth*, 239–44.

34  Schmelzer, "The Crisis before the Crisis," 1005.

35  Elodie Vieille Blanchard, "Technoscientific Cornucopian Futures versus Doomsday Futures: The World Models and The Limits to Growth," in *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, ed. Jenny Andersson and Eglė Rindzevičiūtė  (New York: Routledge, 2015), 93–105; Matthias Schmelzer, "'Born in the Corridors of the OECD': The Forgotten Origins of the Club of Rome, Transnational Networks, and the 1970s in Global History," *Journal of Global History* 12, no. 1 (March 2017): 33, https://doi.org/10.1017/S1740022816000322.

36  Schmelzer, "'Born in the Corridors of the OECD,'" 36; Elodie Vieille Blanchard, "Modelling the Future: An Overview of the 'Limits to Growth' Debate," *Centaurus* 52, no. 2 (2010): 91–116, https://doi.org/10.1111/j.1600-0498.2010.00173.x.

Jantsch in four fundamental ways. First, they could be framed as the problems of the world, or as a global crisis in which the issues of the future could only to be understood as the result of interrelated economic, technological, and social developments. Moreover, these problems were irreversible. Second, only an integrated approach to long-term international planning could tackle these issues. Third, the world's problems could not be solved by scientific and technological innovations alone as scientific and technological advancement was part of the problem, rather than its solution. Fourth, it stipulated that the planning techniques for solving this problem-matrix should be devoid of political ideologies. As will become clear in the sixth section, these tenants constituted the desiderata for an emerging planning programme in the CPB.

For the Club of Rome, it was clear that the existing planning tools, including those of RAND, were not fit for their purposes. Therefore, they employed system theorists Jay Forrester and Hasan Özbekhan to develop a new global model that could analyse "world problems" and formulate adequate actions to tackle them. The third model of this kind called the Third World Model developed by Forrester would eventually deliver the result the Club of Rome was aiming for (the underpinning of this model will be discussed in section 4.6).[37] Forrester's model predicted that, if economic growth was to continue on the scale it did, the collapse of society would be immanent in 70 years. Surprisingly for an organisation stemming from an institute that had been promoting economic growth for over a decade, the Club of Rome concluded that economic growth had to be halted. The message was put forcefully in their seminal report *The Limits of Growth* (1972), the publication of which caused a global stir.[38] Although the implications of this model were heavily contested by the macroeconomists of the OECD (indeed, the board of the organisation took a wavering, some might say negative attitude towards the report), its seeds were sown.[39] Forrester's model solidified the idea that the future brought unprecedented problems for capitalist societies—problems that threatened the very existence of modern society itself.

Given the nature of the RAND forecasting techniques, it is perhaps un-

---

37 A full functional version of the model can be found on: https://insightmaker.com/insight/1954/The-World3-Model-Classic-World-Simulation (accessed on 30-07-2021)

38 Elke Seefried, "Rethinking Progress. On the Origin of the Modern Sustainability Discourse, 1970–2000," *Journal of Modern European History* 13, no. 3 (2015): 377–400, https://doi.org/10.17104/1611-8944-2015-3-377.

39 Schmelzer, *The Hegemony of Growth*, chap. 7.

surprising that the Club of Rome believed the problems facing the world stemmed from a complex interplay of technological, social, and environmental factors. Nor is it surprising that the problems themselves were only visible on a larger timescale. Missing from their modelling technique was how the intergenerational problems of student revolt fitted into the overall picture. It pointed towards democratic problems that the RAND models could not address. The Club of Rome's call to abstain from ideological bickering signalled that they were not completely in tune with the political development of the time and signalled the democratic problems of planning to come—as was the case with the models of the CPB based on the same principles (as I explain in section 4.7). Soon the Club of Rome were accused of seeking technocratic solutions for the problems of the future.[40] However, as I will show in section four, Dutch planners also sought to tackle the democratic problems in tandem with the world problems identified by the Club of Rome. Long-term planning and the world problems it identified were the product of planning tools that were developed under the Cold War conception of historicity. That is to say, the models did not yet deal with the democratic problems of a plural future. However, the emerging scientific research of the future—in the 1960s variously dubbed *futurology, futurism,* and *future studies*—would, as I will show in the next section, eventually lead to the new conceptualisation of historicity.

## 4.2 Koselleck: Accelerating Time

According to Andersson, the futurist and futurologist way of thinking—pioneered, amongst others, by the planners of RAND and the OECD—introduced a new fundamental mode of historicity that was at odds with the previous conception of history that took modernity's progress as the unquestionable arrow of time. Consequently, historical studies of historicity cannot depart from the horizon of modernism in describing the multiple new modes of thought regarding the future that arose in the post-war period. As Anderson suggests:

> [P]revious studies of 'futures past' […] have examined future concepts as questions of historicity and temporality, directly [linking it] to the rise of modernity. The postwar period raises a different challenge, which is

---

40 Vieille Blanchard, "Modelling the Future," 93.

understanding how future horizons and regimes of historicity changed in a time when notions of progress, economic and technological growth, and scientific and political rationality all became sources of contestation, disillusionment, and fear.[41]

The future, in this new conception (Andersson uses the term *futurist*), was too open, diverse, uncertain, and contested to be able to speak about one shared temporal horizon in the post-war period. Or, to put it differently, time's arrow became too dispersed to speak about it in the same theoretical terms that had described the modern historicity of the pre-war period. Andersson continues:

> The postwar period, in fact, can be seen as a series of overlapping historicities in which future horizons changed rapidly and even coexisted, so that the large changes in the temporal horizon described by Reinhart Koselleck and François Hartog for the modern period do not make much sense.[42]

Andersson later clarified that she does not take issue with the writings of Koselleck in particular, but more with his followers, amongst which Hartog.[43] Koselleck's own writing contains in the notion of "layers of time" (*Zeitschichten*) a way to account for the plurality of experiences of time that could characterise the historicities of the post-war period.[44] Like many other commentators of Koselleck's work, Andersson sees the idea of layers of time as opposite to the idea of modern historicity in which the singularity of the horizon of expectation is emphasised. Modernity is all-encompassing, singular, and always forward-moving, whilst a plurality of experiences is in contrast local, repeating, and interdependent. Layers of time, many scholars of Koselleck's work suggest, have to been seen as a critique of modernity and its dominant mode of historical thought. In this reading, a theory of layers of time would be Koselleck's answer to the *crisis of historicism*,[45] providing a grounding of modern historiography which he called *Historik*.[46]

---

41 Andersson, "The Great Future Debate," 1414.

42 Andersson, 1415.

43 As I will explain in the last chapter, I do think that Hartog's theory of presentism is sensible in the light of the futurist conception of historicity. See section 6.7.

44 Andersson, *The Future of the World*, 18–20.

45 This crisis is described in sections 1.7, 2.2, and 3.2.

46 See: Stefan Ludwig Hoffmann, "Koselleck, Arendt, and the Anthropology of Historical Experience," *History and Theory* 49, no. 2 (May 2010): 212–36, https://doi.

Although I do broadly agree with these assessments of Koselleck's work and post-war historicity in general, something crucial is overlooked, namely that the experience of time as singular (as is typical of modern historicity) did not disappear when the future was radically opened up. Although the planning discourse of the late 1960s acknowledged that different groups and individuals had different experiences of time and visions of the future, they did not forgo a reference to a singular future that could guide all of these different experiences. This is precisely, I will argue, the task Dutch planning gave themselves towards the end of the 1960, bringing together multiple visions into one political programme for the future.

The works of Koselleck are remarkably well-suited to make this point. Not only can his theoretical work be read as a reaction to the radically open future of the 1960s; the often implicit political stances he adopts also point towards an ideal for planning and historical research that could bind different experiences of time together.[47] To make this point, I have to historicise Koselleck's own work. Although I lack the time and space here to produce a proper contextualisation of Koselleck's writings from the 1960s and 1970s, I want to illustrate that, on the basis of some contextual clues, my reading of his work is indeed plausible.[48]

Andersson makes futurist thought the defining feature of post-war historicities and contrasts it with the dominant pre-Second World War experience of time as a totalising and progressive process towards modernity. According to Andersson, the Cold War in its first two decades tried to suppress this new mode of historical thinking before it finally came to the fore towards the end of the 1960s.[49] As I made clear in the previous chapter, my own sequence for the emergence of temporal horizons is slightly different. History as totalising progress was not so much a pre-war experience of time but can historically better be located in the first two decades of the Cold War.

---

org/10.1111/j.1468-2303.2010.00540.x; Niklas Olsen, *History in the Plural: An Introduction to the Work of Reinhart Koselleck* (New York: Berghahn Books, 2012); Juhan Hellerma, "Koselleck on Modernity, Historik, and Layers of Time," *History and Theory* 59, no. 2 (2020): 188–209, https://doi.org/10.1111/hith.12154.

47  This point is also made in: Jan-Werner Müller, "On Conceptual History," in *Rethinking Modern European Intellectual History*, ed. Darren M. McMahon and Samuel Moyn (Oxford: Oxford University Press, 2014), 74–93.

48  For a contextual reading of Koselleck's work, see: Olsen, *History in the Plural*. Contrary to my claims, Olsen suggests that Koselleck's idea of layers of time dates back to his dissertation. In contrast, I would suggest that the theme of the multiplicity of experiences of time only became pronounced as a stand-alone subject after 1965.

49  Andersson, "The Great Future Debate," 1414.

As shown in the second chapter, the interwar conception of modernity was more diverse than the conception of modernity as inescapable totality in the Cold War might suggest. The temptation of ascribing a single totalising view of progress to interwar historicity stems from work on the philosophy of history written in the first two decades of the Cold War, in which the authors projected their own experience of time, either back to the pre-war period, or on modernity as a whole. Examples of such works (mentioned or discussed in the previous chapter) are Karl Löwith's *Meaning in History* (1949), Judith Shklar's *After Utopia* (1957), and Arendt's *Between Past and Future* (1961). Another example would be Koselleck's dissertation, published under the title *Critique and Crisis* (1954).

The subtitle of Koselleck's dissertation (in its published form) was "A Study of the Pathogenesis of the Bourgeois World (*Der bürgerlichen Welt*)."[50] The disease of the modern bourgeois world that Koselleck was investigating, was the origin of the totalitarian ideologies of fascism and communism. According to him, what these ideologies had in common was the use of an inescapable future to justify any form of action, however inhumane, without the actors having to take responsibility for their actions, as they were simply agents of a historical development. Such an analysis of the modern predicament bears all the characteristics of the Cold War politics that could also be discerned in Shklar and Arendt.[51] In this formulation, fascism and communism became one big evil, and modern notions of progress removed agency from history. Thus, the origins of totalitarian evil had to be located in liberal civil society itself and, as such, modern society was always in danger of turning into a totalitarian regime. Therefore, liberalism as an ideology itself could not be trusted either.

More specifically, Koselleck thought that the origins of totalitarianism could be located in the Enlightenment. Sketching a genealogy of civil society characterised by the bifurcation of morals and politics, Koselleck started with the rise of the absolute state in response to religious conflict and civil war.[52] In Hobbes' *Leviathan* (1651), the freedom to hold private religious

---

50 Reinhart Koselleck, *Kritik und Krise: Eine Studie zur Pathogenese der bürgerlichen Welt* (Frankfurt am Main: Suhrkamp Verlag, 1973). The term "bürgerlichen Welt" is difficult to render in English, since it can also mean civil society. For the subsequent references, I will use the English translation: Reinhart Koselleck, *Critique and Crisis: Enlightenment and the Pathogenesis of Modern Society* (Cambridge, MA: MIT Press, 1988).

51 Arendt, "The Concept of History"; Judith Shklar, *After Utopia: The Decline of Political Faith* (Princeton, N.J: Princeton University Press, 1957).

52 Koselleck, *Critique and Crisis*, 48–50.

beliefs was allowed, as long as the central dogmas, laws, and social order were left to the sovereign. Such privately held beliefs, disconnected from politics of the state, would, in the eighteenth century, be secularised and developed into morals of equality and universal ideals of cosmopolitism. As such, they formed the basis for the public sphere. With no reference to actual politics, morals could increasingly demand more from society, with its wishes projected into a utopian future. This utopian future, Koselleck argued, was the totalising vision of history as singular progress. All the while, moral authority was just as much a tool for social pressure and control. The twist, Koselleck contested, was that moral authority would not recognise itself as an authority, thus denying its own political nature. Koselleck was strongly influenced by Carl Schmitt at this point—to whom he even dedicated the book—who had sought, against liberalism, to re-establish the state as the proper domain of politics and the origin of norms in society.[53]

For all its originality, *Critique and Crisis* remains a typical product of Cold War critique and pessimism, very similar to those Martin Heidegger—a teacher of Koselleck—was also producing at the time.[54] However, this pessimism started to wane when Koselleck began working on his habilitation thesis: *Prussia between Reform and Revolution* (1967). The work investigated the reaction of the Prussian bureaucracy in the so-called *Vormärz* period (1815-1848) to the political upheaval and revolutionary spirit of the French Revolution, and provided a much more positive evaluation of the public sphere than his previous work.[55] Koselleck argued that in their policymaking, Prussian civil servants had attempted to exercise a degree of "give and take" between the strong political pressure from civil society on the one hand, and the old regime and the traditional agrarian society on the other. Through this balancing act, they had wished to bring modern politics to the Prussian state. In contrast to *Critique and Crisis*, here Koselleck was not outright negative towards bureaucracy's tendency to move along the revolutionary wishes of the bourgeoisie. Even if the Prussian bureaucrats would ultimately fail in their efforts, they were not misguided.

Innovative in his approach, Koselleck stressed the different temporal

---

53  Olsen, *History in the Plural*, 47–48.

54  Martin Heidegger, "The Question Concerning Technology," in *The Question Concerning Technology, and Other Essays*, trans. William Lovitt (New York: Garland Publishing, Inc., 1977); Martin Heidegger, "The Age of the World Picture," in ibid, 115–54.

55  Reinhart Koselleck, *Preußen zwischen Reform und Revolution: Allgemeines Landrecht, Verwaltung und soziale Bewegung von 1791 bis 1848* (Stuttgart: Klett-Cotta-Verlag, 1975).

horizons to which the Prussian civil servants had to adhere. There was the utopian progress promised in the tumult of the French Revolution, but there were also the slow-moving developments in the Prussian countryside. The bureaucrats aimed to bring these visions of the future together in one movement of the Prussian state. As he wrote: "All laws of the reform-machinery were aimed at movement; a movement that was understood in line with the idealistic historical-philosophies ideas of the fulfilling of a world-plan encompassing universal freedom and morality."[56]

Implicitly, Koselleck was reacting to the German political debates of the 1960s. With the increasing influence of the SDP, student protests, and the drawing to a close of the post-war consensus period, his supervisor Werner Conze had worried about the neutral image of the state. With social organisations and movements on the rise, Conze wondered, how much of the state's power and tasks could be delegated to the institutes of civil society and, furthermore, how much influence could social movements have over the state?[57] Conze was quite close to Schmitt and his followers of the Heidelberg school of jurisprudence, who feared the disintegration of the state if civil society were allowed to gain too much influence.[58] In contrast, the competing school of jurisprudence inspired by Rudolf Smend, who enjoined a considerable influence over the German Federal Constitutional Court in Karlsruhe (*Bundesverfassungsgericht*), argued that the state could play a unifying role in bringing together all social organisations.[59] Koselleck (implicitly) suggested a different path. Adhering to different temporal dimensions, the state could allow multiple competing social organisations to pressure it if that would ensure the equality of civil society, thereby ridding civil society of the potential danger of destroying the state itself. As explained in the first chapter, Koselleck's historical example of such an approach was the 19th century scholar Lorenz von Stein, who had already anticipated many of the historiographical theories Koselleck was to develop.[60]

By 1969, with a coalition of the social democrats and liberals in power at

---

56 Reinhart Koselleck, "Staat und Gesellschaft in Preußen 1815-1848"," in *Staat und Gesellschaft im deutschen Vormärz 1815-1848*, ed. Werner Conze (Stuttgart: Klett-Cotta-Verlag, 1962), 86; Cited in: Olsen, *History in the Plural*, 128.

57 Olsen, *History in the Plural*, 125.

58 Specter, *Habermas*, 12.

59 Olsen, *History in the Plural*, 134; Moses, *German Intellectuals*, 186–88; Specter, *Habermas*, 191–203.

60 Reinhart Koselleck, "Historical Prognosis in Lorenz von Stein's Essay on the Prussian Constitution," in *Futures Past: On the Semantics of Historical Time*, trans. Keith Tribe (New York: Columbia University Press, 2004), 58–71.

the federal level, the students' demands for a more democratic and egalitar-ian university were transformed into concrete policy proposals, with educa-tion reforms and new organisational structures for universities.[61] This, by all accounts, did not temper the upheaval wrought by the protesting students. In 1968, Koselleck witnessed how Conze, announcing his candidacy for the rector of the University of Heidelberg, was pelted with tomatoes and eggs by students. The students protested the fact that Conze had never accounted for his Nazi past, yet still held on to his professorship. Koselleck also saw that Conze's stance was unnecessarily inflexible when it came to universi-ty reform, clinging to the old structures when challenged. These events are likely to have inspired Koselleck to further theorise generational clashes in terms of different temporal horizons.[62] However, his period of investigation remained the 18th and 19th centuries. Nonetheless, an examination of his choice of words reveals his contemporary concerns.

In a series of articles collected in *Futures Past* (1979), Koselleck argued that structural social transformations underpinned the emergence of a new mode of historicity around 1800. That is to say, the manner in which peo-ple organised their lives radically altered towards the end of the 18th cen-tury. Revolutionary upheaval and the inability to form new stable political structures were also part of the cause.[63] Additionally, the advancement of technology that loomed large in Europe's imagination—especially the rail-way locomotive—gave way to a feeling that time was going faster than be-fore. People's habits were shifting at a faster tempo. The difference between habits and practices, between two consecutive generations, could already be enormous.[64] Koselleck's explanatory model, although based on a completely different methodology, bears some resemblance to the investigation of the OECD planners of the "problems of modern society". Both were alarmed by the radical political ideals of the younger generation, and both attempted to explain these radical ideals as part of a clash of generations and the shifting habits that occurred with fast social change.

Similarly, when Koselleck summed up what had led to an experience of modernity as progress, he named developments that mirrored the concerns

---

61 Moses, *German Intellectuals*, 141–55; Olsen, *History in the Plural*, 204.

62 Olsen, *History in the Plural*, 214.

63 Reinhart Koselleck, "Modernity and the Planes of Historicity," in *Futures Past: On the Semantics of Historical Time*, trans. Keith Tribe (New York: Columbia University Press, 2004), 21.

64 Reinhart Koselleck, "The Unknown Future and the Art of Prognosis," in *The Practice of Conceptual History: Timing History, Spacing Concepts*, trans. Todd Presner (Stanford, CA: Stanford University Press, 2002), 141–42.

for the future around 1968:

> [P]rogress was not simply an ideological mode of viewing the future; it corresponded, rather, to a new everyday experience which was fed continually from a number of sources: technical development, the increase of population, the social unfolding of human rights, and the corresponding shifts in political systems.[65]

Contrary to his earlier thoughts, as expressed in *Critique and Crisis*, Koselleck argued that progress did not solely originate in the visions of a utopian future espoused by the private morals of the bourgeoise sphere. It was, he wrote, "not simply an ideological mode of viewing the future."[66] Rather, there were underlying social realities that fostered a temporal horizon upon which singular events were to be expected. These future events were very similar to the issues with the future Koselleck was facing in his time. The fear of population growth and technical development mirrored the concerns of the OECD and the Club of Rome. Koselleck even explicitly acknowledged this continuity: "[T]he onset of such acceleration, the tempo of historical time has constantly been changing, and *today*, thanks to the population explosion, development of technological powers, and the consequent frequent changes of regime, acceleration belongs to everyday experience."[67] What is more, (as I explained in section 1.2) prognosis and planning further added to his experience of acceleration.[68] In the same way the models of RAND and the OECD had opened up a future far longer, more open, and more disastrous than ever before, nothing in the experience of time seemed stable anymore.

Although Koselleck argued that an experience of acceleration characterised the whole of modernity, his use of the simple word "today" indicates that an experience of fast acceleration characterised the emerging horizon of expectation of the late 1960s in particular. The problem, Koselleck maintained, was not so much that accelerating time subsumed individual action into one holistic process—which had been the Cold War fear—but rather that acceleration made the gap between the horizon of expectation and

---

65  Koselleck, "Historical Prognosis," 60.

66  Koselleck, 60.

67  Reinhart Koselleck, "Historical Criteria of the Modern Concept of Revolution," in *Futures Past*, trans. Keith Tribe (New York: Columbia University Press, 2004), 50, emphasis added.

68  Reinhart Koselleck, "Historia Magistra Vitae: The Dissolution of the Topos into the Perspective of a Modernized Historical Process," in *Futures Past*, trans. Keith Tribe (New York: Columbia University Press, 2004), 39.

space of experience too large. This meant that humans no longer knew how to connect their everyday actions bound up by the repeating structures of the space of experience with the singular events looming on the horizon of expectation. In other words, if the problems of the future were so large, how could any form of human action resolve them? In contrast to the Cold War regime of historicity, under the experience of acceleration, human agency was no longer naturally part of the progress of history.

Koselleck thought that the solution to this predicament was social history: "[It] shows us the boundaries of the possible otherness of our future, without being able to dispense with the structural conditions of possible repetition."[69] If historical research could show that the events of the future might not be wholly novel, but contain elements of structures from the past, the future could be "moderated."[70] In that sense, Koselleck's demonstration that the issues of technology, population, and radicalised youth movements had long histories in modernity was part of his attempt to provide the problems of the future with a certain familiarity. Such a historical effort should go hand in hand with state planning, as it was planning's task to weave together the multiple layers of time into "a labyrinth of movement"[71]—that is to say, coupling structural long-term developments, as laid bare by social historians, with the movement of progress individuals could make in their lives, together with the uncertainty of an open future. With such planning, individuals would again be able to see their agency aligned with the future.

The shift in Koselleck's thinking between his dissertation and habilitation, speaks of a whole new conceptualisation of modern historicity. Although modernity still instilled a horizon of expectation in which radical new things were to be expected, this horizon was no longer characterised by one totalising notion of progress. Instead, a multiplicity of experiences of time gave the future a plural character. This new conception brought with it a new duality. On the one hand, the openness allowed for a plurality of visions of the future adhering to different experiences (layers) of time coming to the fore. On the other hand, the horizon of expectation was still dominated by singular events, such as technological innovation, instilling a singular notion of progress. As I have argued, in the German context, this duality was bound up with political discussions on the relation between the state and civil society, raising the question of whether competing interest groups

---

69  Reinhart Koselleck, "Representation, Event and Structure," in *Futures Past*, trans. Keith Tribe (New York: Columbia University Press, 2004), 114.

70  Koselleck, "Modernity and the Planes of Historicity," 23.

71  Koselleck, "Historical Prognosis," 60.

would undermine the unity of the state. Koselleck suggested that a stable state was possible even with different competing views of the future, as long as the equality of the state was ensured, and the state was able to navigate the pluralities of time experiences into one movement towards the future. I want to suggest that this solution also formed the basis of a new planning ideal.

## 4.3 Habermas: Planning and Communication

Koselleck's new conceptualisation of the future was a prudent embrace of social democratic policies and held democratic potential. A multiplicity of competing social organisations could influence the state without the state losing its independence as long as it was able to weave the different social demands into a coherent vision of the future and counteracted economic inequality. The ramifications of political theory in relation to the conceptualisation of the future will be further explored in this section by analysing the work of Jürgen Habermas, another German scholar from the period who wrote on the same topics. For Habermas, long-term planning posed an even more fundamental problem for democracy than Koselleck had assumed, as long-term planning undermined the distinction between objective science and subjective values.[72] As will be discussed in section five, this argument on the distinction between objectivity and subjectivity made an impact on the Dutch discourse of social planning. Habermas' theories thus provided the building blocks from which Dutch planners would later formulate a new planning ideal.

        In the Germany of the early 1960s, under the auspices of the debates sketched in the previous section about the relation between state and civil society, a group of conservative scholars started to promote the ideal of technocracy as a manner to make clear demarcations between state and society.[73] Historians Thomas Nipperdey and Ernst Nolte, the philosopher Hermann Lübbe, and the sociologist Helmut Schelsky argued, in support of ordoliberalism, that the state could not be subject of too many social partial interests, otherwise it risked undermining free civil society and the free market.[74] It

---

72 The essays on this topic have been collected in: Jürgen Habermas, *Technik Und Wissenschaft Als 'Ideologie'* (Frankfurt am Main: Suhrkamp, 1968); translations of these essays have been published in: Jürgen Habermas, *Towards a Rational Society: Student Protest, Science and Politics* (Boston, MA: Beacon Press, 1970).

73 Moses, *German Intellectuals*, 205–6.

74 For an overview of these ordoliberal arguments, see: Thomas Biebricher, "Neo-liberalism and Democracy," *Constellations* 22, no. 2 (June 2015): 257–60, https://doi.

was an argument akin to Max Weber's warning against professional politics as "horse-trading" (see the first chapter), with the crucial difference that ordoliberals and German conservatives did not believe in a common good that the state could serve. Instead, it was the task of the state to provide the conditions for a free society and free market to exist. This entailed a minimum of social services and benefits in the form of a restricted welfare state. For these scholars, the question was who decided on the social provisions if it could not be the result of the competing partial interests of labour movements and social democratic parties. The adherents of technocracy saw potential in delegating the questions of welfare to scientists and social engineers in service of the state who could, on the basis of the objective norms of efficiency, make informed decisions on the distribution of social provision.

These ideas gained their most pungent formulation in Schelsky's *Man in Scientific Civilization* (1961). According to Schelsky, the legitimacy of a government in a technological advanced society was no longer dependent on the will of the people or fundamental principles. Science and technology had advanced to such a degree that the needs of a society could be objectively established on a scientific basis, making ideological bickering unnecessary. In such a situation, the legitimacy of a government was only given in so far as they were efficient in satisfying the objectively measured needs. Alluding to Carl Schmitt's famous definition of the sovereign as the one who decides on the exception, Schelsky wrote: "Sovereign may be called whoever in a given society achieves highest efficiency in the application of scientific and technological measures."[75]

Writing in the early 1960s, Habermas reacted, at least in part, to these ideas on technocracy. On other points, however, he was aware of what he saw as a degradation of the public sphere and public opinion under the influence of US social science. As I have described in the previous chapter, under the influence of Cold War rationality public opinion was increasingly understood as a aggregation of individual preferences—something strongly lamented by Habermas. Meanwhile, student protests had also broken out at the Institute for Social Research in Frankfurt, where Habermas was conducting research for his habilitation at the time, and the students' demands for new forms of democracy were clearly on Habermas' mind when he formulated his ideas.[76] In his article "The Scientization of Politics and Public Opin-

org/10.1111/1467-8675.12157.

75  Helmut Schelsky, "Der Mensch in Der Wissenschaftlichen Zivilisation," in *Auf Der Such Nach Wirklichkeit* (Düsseldorf: Eugen Diederichs Verlag, 1961), 439–81.

76  Specter, *Habermas*, 101–11.

ion" (1963), Habermas explored these interlocking issues in reference to two models of politics he had devised: one decisionistic and one technocratic. The first model was derived from decisionist thinkers such as Weber and Schmitt and was characterised as revolving around a choice between "competing value orders and convictions, which escape compelling arguments and remain inaccessible to cogent discussion."[77] Politics, in this vision, essentially was the struggle between ideologies, which were partly incommensurable with each other. Consequently, the political decision could not be made in reference to an outside normative order, such as the law, the economy, or science.).[78]

The second model was based on the ideas of the conservative proponents of technocracy. The political decisions were seemingly made exclusively in reference to one overreaching normative order, namely, that of science. Although at first it seemed in Habermas' terms that Schelsky had argued that in the scientific age the decisionistic model was replaced by the technocratic model, in reality Habermas suggested that the latter reduces the former to its core, but did not replace it—an argument he took from the technocratic proponent and ideological adversary Lübbe.[79] In the technocratic model, ideological strife was removed from politics on the state level, but the political decision itself did not disappear. Moreover, any sovereign or politician who decides to act on the instruction of experts could not appeal to a value order—ideological or otherwise. Therefore, science isolated the social ideologies of civil society and reduced state decisions to their core: the decision outside of a normative value order, just as Schmitt would have wanted it. As Habermas wrote: "[C]alculation by decision procedures, when carried to extremes, reduces the decision itself to its pure form, purging it of every element that could be made accessible in any way to cogent analysis."[80]

What Habermas admired in the protesting students was their willingness to confront the older generation of university professors—in particular those with Nazi pasts, such as Conze and Schmitt. Nazi elements were

---

77 Jürgen Habermas, "The Scientization of Politics and Public Opinion," in *Towards a Rational Society: Student Protest, Science and Politics*, trans. Jeremy J. Shapiro (Boston, MA: Beacon Press, 1970), 63.

78 Matthew G. Specter, "What's 'Left' in Schmitt?: From Aversion to Appropriation in Contemporary Political Theory," in *The Oxford Handbook of Carl Schmitt*, ed. Jens Meierhenrich and Oliver Simons (Oxford: Oxford University Press, 2017), 426–55; Cf. Ellen Kennedy, "Carl Schmitt and the Frankfurt School," *Telos* 1987, no. 71 (March 20, 1987): 37–66, https://doi.org/10.3817/0387071037.

79 Habermas, "The Scientization of Politics," 65.

80 Habermas, 65.

never sufficiently removed from German academia and Habermas considered Schmitt's continued presence in post-war political discourse—even if Schmitt was removed from any university position—was evidence for this. Consequently, he interpreted the conservative plea for technocracy as a result of Schmitt's dangerous ideas.[81] The troublesome development from a decisionistic to a technocratic model was, according to Habermas, further spurred by US social science. The establishment of societal needs through the scientific investigation of society's preferences as Schelsky had described was, for Habermas, a typical product of the public opinion research as carried out by the US pluralist school in political science. As shown in the previous chapter, Habermas was partly right. Tinbergen and Frisch had indeed conceived of the aggregation of preferences in decision models as a viable tool to establish political goals, and even as a stand-in for public opinion. However, they never adhered to any technocratic model, as described by Schelsky and Habermas.

In an earlier article, Habermas had criticised the US political sciences for its reduction of politics to consumer behaviour, which for him amounted to reducing politics to market forces.[82] Besides the political implications, this issue was also epistemic in nature. Individuals always formulated their preferences on a shifting horizon of interpretation that was established in the social interactions of *the life-world*.[83] Habermas argued that the horizon of social science was derived from this life-world, but ultimately detached from it, therefore lacking the dialectical character of the life-world itself—a view shared by Husserl (discussed in the second chapter). Behavioural social science, Habermas argued, therefore had no way of accounting for this changing horizon of interpretation. Human subjects were not like physical objects, since subjects changed when studied.[84] This reference to the notion of the horizon reveals a shared teacher between Koselleck and Habermas:

---

81 Jürgen Habermas, *Stichworte zur »Geistigen Situation der Zeit«* (Frankfurt am Main: Suhrkamp, 1979).

82 Jürgen Habermas, "Reflexionen Über Den Begriff Der Politischen Beteiligung," in *Student Und Politik: Eine Soziologische Untersuchung Zum Politischen Bewusstein Frankfurter Studenten*, ed. Christoph Oehler and Friedrich Weltz (Neuwied: Luchterhand Verlag, 1961), 11–55.

83 Jürgen Habermas, "Technical Progress and the Social Life-World," in *Towards a Rational Society* (Boston, MA: Beacon Press, 1970), 50.

84 Habermas' emphasis on social and economic also shows the continuation of dialectical thinking in the Marxist tradition. For more information of the workings of these two traditions of philosophical thought in the work of Habermas, see: Specter, *Habermas*, 100–101.

both had studied under Hans-Georg Gadamer in Heidelberg.[85] Like Kosel-leck, Habermas argued that social and economic developments brought about by technological and scientific development themselves changed the horizon of individuals. As such, technology and science could never function as a neutral normative order in reference to which political interests could be formulated.

Already in 1962, Habermas recognised that the long-term future outlook developed by RAND and the OECD fundamentally altered the problem. If indeed the planners could account for technological and social change, as Solow had proposed, then social science could account for the changing horizons of citizens:

> [A] new type of interdisciplinary, future-oriented research, which ought to clarify the immanent developmental state and social preconditions of technical progress in connection with the cultural and educational level of society as a whole. They would thus offer a viewpoint different from that bounded by preexisting, unreflected social interests. These investigations, too, obey a hermeneutic interest in knowledge.[86]

By emphasising the interdisciplinary and long-term aspects of this new form of planning, Habermas had rightly identified what made the models of RAND and the OECD novel, namely that their predictions were not continuations of established patterns, but predictions of the emergence of new patterns. Since long-term integrative planning could account for the dialectical development of society, the problem of the hermeneutical horizon that formed an obstacle for behavioural sciences could be alleviated. As such, this new planning science was even more dangerous, reducing all politics—even those of the competing social groups in civil society—to the technocracy of pure decision. Since neither the decisionistic nor the technocratic model seemed to provide an answer to this problem, Habermas introduced a third, pragmatic model based on the works of John Dewey.[87] Dewey had stressed that the use of the instruments of science and technology for the benefit of society should depart from the interaction between scientist and the lay public. Here Habermas stressed the need for public debate on science and technology in which both scientists and non-scientists could participate. Only such a conversation could establish a shared horizon on the basis of which

---

85  Specter, 91.
86  Habermas, "The Scientization of Politics," 73.
87  Habermas, 67–68.

the needs and preferences of society could be formulated in a democratic manner.

It may seem that such a deliberative model was a return to an older planning ideal, such as that professed by Otto Neurath, who stressed the interplay between scientists, education, and citizens in making political decisions (as described in the second chapter). However, Habermas recognised that with the long-term outlook of planning, the issue had significantly changed. If the development of the normative order of society was made plannable, then citizens, politicians, and scientists were, in a democratic society, no longer simply deciding on the basis of a social value order in the present. Rather, they were deciding on how this value order would *develop* in the future.

Therefore, if citizens were to make decisions on their future society, they had to adopt a futurist mindset: They had to imagine the future they wanted to strive for in an open manner, not bound by grand historical narratives of the development of society or technology. However, in order to form this image of the future, they were dependent on the prognoses of the planners and so, in the epoch of unprecedented events, planners were needed to identify the grand issues of the future. This further discredited the idea that science could remove politics from its analysis and decision making. For this reason, Habermas also rejected the pragmatist model of politics. If indeed, the choice for the future was an open choice, which under the experience of acceleration seemed to be the case, planning had to find a way to combine the subjective value orders of civil society with the objective structural developments that science could identify. Neurath's model of the scientific expert as the provider of objective facts and the cartographer of possible options no longer sufficed. The facts and maps of the planner had to already account for the value orders of the citizenry. This, Habermas claimed, could only happen in a fourth, as yet unformulated model of politics, which he later would call the *communicative model*.[88]

The differences between Neurath and Habermas illustrate how much planning had to change if it wanted to adapt to the democratic problems that long-term prognosis brought with it. Habermas never explicitly conceded that a new conceptualisation of modern historicity emerged, but nonetheless, for him, the issues of the long-term outlook showed why the older Marxist programme with its notion of progress no longer sufficed. Science still had to perform a guiding role in a political programme for the future, but could only do so in conversation with different social groups in society.

---

88 Habermas, 73–74; Specter, *Habermas*, 117–23.

Like Koselleck, Habermas thought that there was an untapped potential for scientific planning in helping citizens to establish a horizon upon which a shared vision could be formulated.

## 4.4 Discussions on Social Planning in the Netherlands

The discussions on the relation between democracy, the state, and scientific expertise (I call this the decisionist imaginary) held in Western Germany by Koselleck and Habermas, also took place in the Netherlands under the auspice of *social planning*. At its core, social planning was a proposal to go beyond purely economic planning to instead plan multiple facets of modern society. However, the idea brought together a number of issues that had arisen in the wake of the growth of the welfare state (*verzorgingstaat*, in Dutch, literally translated as "caretaker state"). Amongst these issues were demands for democratisation, long-term visions for society, and the institutionalisation of sociologists as government advisors. In this section, I will show how in this complex layering of issues, the problems of the future (as identified by the OECD), and ideas on new forms of planning (as could be found in the works of Koselleck and Habermas) found their particular Dutch formulation. Like Koselleck's proposal, Dutch planners sought to synthesise the plurality of future visions found in civil society, and like Habermas, Dutch planners realised that this synthesis entailed a bridging of subjective values and objective facts.

Ideas for social planning were first formulated by sociologists working for the Ministry of Social Work (later renamed as the Ministry of Culture, Recreation, and Social Work in 1965). The ministry was initially founded with the purpose of deploying welfare benefits and a system of subsidies for cultural programmes. However, under the leadership of Marga Klompé of the Catholic People's Party, its scope was soon expanded via the setting up of a network of local social work centres for the coordination of governmental programs for sport, healthcare, social, and cultural services, such as youth centres and community centres. These networks were coordinated in semi-governmental councils, such as the National Council for Social Work in which representative social workers from the local centres met and discussed their overarching strategies.[89] These councils were staffed by a group of young sociologists who were eager to present themselves as government

---

89 Ido De Haan and Jan Willem Duyvendak, eds., *In het hart van de verzorgingsstaat: Het ministerie van Maatschappelijk Werk en zijn opvolgers (CRM, WVC, VWS, 1952-2002* (Zutphen: Walburg Press, 2002), 74–81.
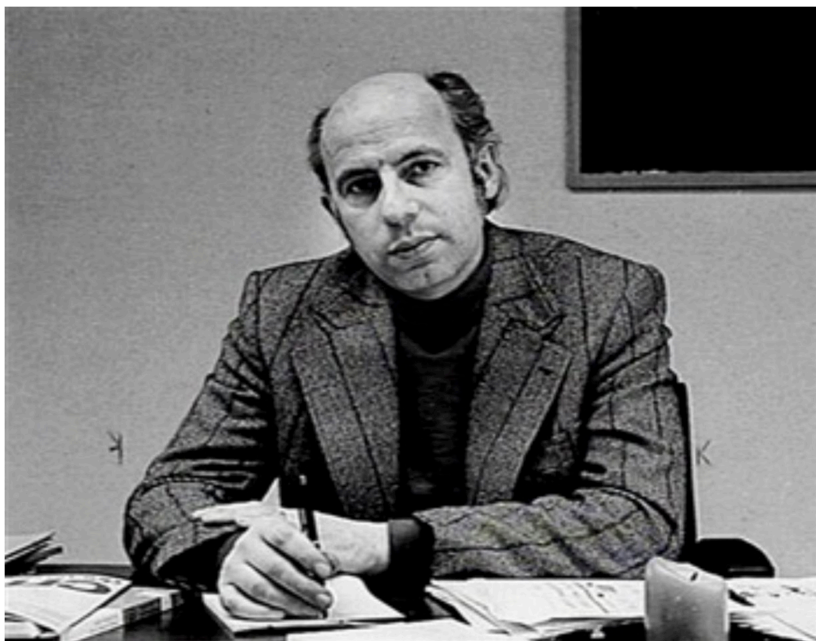
**Figure 4.1 A.J.M. (Louis) van Tienen, *Katholiek leven in beeld*, 3 October 1977**

After his work for the Ministry of Culture, Recreation, and Social Work, Van Tienen became the first director of the Social and Cultural Planning Bureau, established in 1973. His ambitious career was unfortunately cut short in 1978 when he died in a car crash.

advisors. Inspired by American books, such as the previously mentioned *The Affluent Society* by Galbraith, sociologists such as Louis van Tienen and Jan Godefroy used these social councils to argue that the goal of government policy should not be economic prosperity, but rather a broader defined social well-being (*welzijn*). Consequently, planning had to include topics such as education, public health, and the environment (see figure 4.1).[90]

In part, the discussions on social well-being were a continuation of those on social alienation and express a concern for personal development propagated by Willem Banning and members of the Utrecht School such as Willem Pompe, Marinus Langerveld, and Pieter Baan in the 1950s (as discussed in the previous chapter).[91] Contrary to these older discussions, the sociologists working for the Ministry of Culture, Recreation, and Social Work no longer saw the family as the only mediating institute that could foster personal development and well-being. Rather, the network of social organisations set up by the ministry was to provide the support and opportunities in which citizens could develop the freedom of self-expression. As Van Tienen wrote: "[T]he needs and preferences in society can never be autonomous. The wishes of a society are always influenced by the social norms which should be the object of social policy."[92]

The social environment that had been lost in the discussion on progress and ideology of the 1950s had miraculously returned. However, the well-being sociologists stated that individual development was still the ultimate goal of social policy and they acknowledged that a strong social milieu potentially undermined individual freedom. Van Tienen suggests that such strength in social norms "becomes problematic in the specific case of well-being: unmarried mothers and homosexuals will suffer the most by the rejection of their 'normal' fellow citizens."[93] Influenced by cybernetic thinking, Van Tienen proposed the development of a mode of policymaking in which the individual experiences and values of different groups of society had to be heard, comprising an overreaching social programme that would not trample these experiences and values. This was an expression of a democratic ideal in which society was shaped by the state through the engagement of

---

90 De Haan and Duyvendak, 114–22; Paul Den Hoed, "Een Keur van Raadgevers: Honderd Jaar Vaste Adviescolleges," in *Op Steenworp Afstand: Op de Brug Tussen Wetenschap En Politiek* (Amsterdam: Amsterdam University Press, 2007), 109–10; Duyvendak, *De Planning van Ontplooiing*, 56.

91 Duyvendak, *De Planning van Ontplooiing*, 45–49.

92 Louis Van Tienen, ed., *Anatomie van Het Welzijn* (Deventer: Van Loghum Slaterus, 1970), 31.

93 Van Tienen, 31.

different social groups with (semi-governmental) social organisations as the mediating institutions.

It was also an expression of a planning ideal. According to Van Tienen, the participation of different social groups was such a complex issue that no one government agency could manage it. Instead, it needed a central planning institute that could coordinate the actions of all the departments involved.[94] From the National Council for Social Work followed the first in a series of reports with pleas and plans for the founding of such as planning bureau from 1966 onwards.[95] In one of these reports, Van Tienen wrote:

> [O]ne sees undeniably a 'democratic' motive [...] when it comes to emancipation and self-development in the restructuring of society [through social planning], therefore one has to strive to employ means to actively involve citizens in the choice and implementation of policies aimed at the improvement of the social climate.[96]

The tension between individual and social norms that Van Tienen had identified earlier was thus mediated by making planning democratic, allowing individuals to shape their own social environments. In another report, Godefroy went one step further, arguing:

> The shaping of the future society is now hardly a public matter. The practice of sectoral planning is largely a technocratic affair [...]. It is barely capable of stimulating the imagination of citizens. Politically speaking, without this [citizens participation] scientific expertise cannot do their job properly. [...] The establishment of an independent organisation [a social planning agency] with the task of bringing the future in the public's view is a necessary condition for the functioning of parliamentary democracy.[97]

Echoing Habermas' earlier analysis, Godefroy admitted that planning had,

---

94  Van Tienen, 23.

95  Nationale Raad voor Maatschappelijk Welzijn, *Sociale Planning, Een Instrument van Welzijnsbeleid* (The Hague: NRMW, 1966); Jan Godefroy, "Toekomst, Wetenschap en Politiek: pleidooi voor een nationale planontwikkelingsraad" (The Hague: NRMW, 1970); Jan Godefroy, ed., *welzijnszorg, planning en beleidsvoering: Pleidooi voor een Georganiseerd Toekomstdenken op het gebied van de Welzijnszorg* (The Hague: NRMW, 1972).

96  Nationale Raad voor Maatschappelijk Welzijn, *Sociale Planning, Een Instrument van Welzijnsbeleid*, 95; See also: Van Tienen, *Anatomie van Het Welzijn*, 31.

97  Godefroy, "Toekomst, Wetenschap en Politiek," 32.

up to that point, been a rather technocratic affair, but contented that a new agency for social planning should involve active citizen participation. Such participation was only possible if citizens did not only influence planning on the basis of current social norms, but also took the development of these values into account. Citizens were thus in need of images of the future and a future planning bureau had to provide these images.

The way in which Godefroy spoke about "imagination of citizens" of future issues as an incremental part of social planning and democratisation was strongly influenced by the futurist discourse employed by Workgroup 2000 (Werkgroep 2000). This was a group of cooperating  (predominantly protestant) church communities who were part of an international network of futurists thinkers and organisations, both in the East and West, of which CPB planners Jan Tinbergen and Fred Polak were also part. [98] One of the most candid spokespersons of the Dutch futurist movement was Bart van Steenbergen. In his *Order or Conflict* (1969), Van Steenbergen had scolded the older planning ideals of the 1950s for being too focussed on consensus and thus unable to properly address the plurality of the future. Borrowing two terms from the French planner Pierre Massé, he distinguished between a *retrospective* and *prospective* method of prognosis.[99] Dutch planning so far had only employed a retrospective method, he contended, meaning that it only based on the extrapolation of past patterns into the future.

The prospective method, in contrast, focused on the exploration of the future. By imagining of the future, forecasters could discover its many possibilities. An image in this way prepared the futurologist to recognise *the moment* when the right condition arose on which any of those visions could be made reality. Van Steenbergen writes:

> [T]he prospective method is first and foremost an attitude of openness towards what is naturally open, namely the future […]. Imagination and will (i.e. wanting to achieve something) form the starting point of the prospective method. Indeed, the prospection tries to form an image of the unforeseen to be able to cope with it as well as possible.[100]

98 Jenny Andersson and Anne-Greet Keizer, "Governing the Future: Science, Policy and Public Participation in the Construction of the Long Term in the Netherlands and Sweden," *History and Technology* 30, no. 1–2 (April 3, 2014): 104–22, https://doi.org/10.1080/07341512.2014.932563.

99  Bart van Steenbergen, *Orde of Conflict: Tegengestelde Maatschappijvisies Binnen de Futurologie*, Euros-Boekjes 2 (Amersfoort: Werkgroep 2000, 1969), 25–26.

100 Van Steenbergen, 26.

Where the retrospective method was aimed at mapping out possibilities and making decisions in the present, the prospective method sought to prepare the policymaker or politician for *when* to make the right decisions, coping with the new situation when it arose. Consequently, for Van Steenbergen, the goal of prognosis was to establish a "future consciousness" that would allow the human subject "to be open" to the future.[101] A vital part of this form of prognosis was the stimulation of the imagination. However, imagining the possibilities was not a passive affair predicated on simply waiting until the possibility "popped up". Rather, imagining would contribute to a "world consciousness," thus contributing to the capacity to act in the present.[102] In short, knowing what the future could possibly hold allowed society to actively strive for the creation of that possibility. For example, the peaceful resolution to the Cold War had to be strived for in the "here and now" by stimulating people's imagination of a peaceful future beyond the competing ideology of East and West. Future research, according to Van Steenbergen, was not to be limited to the scientist. Rather, world consciousness should be promoted for all human beings.[103] Such an imagination of the future would increase active citizenship, allowing citizens to strive for the future they wanted without being restricted by the ideology of world powers.

Van Steenbergen was inspired by Habermas' writings on the future as he similarly contented that prospective prognosis contained a mixture of facts and norms. Future scenarios had to be realistic, but also started from the subjective will and consisted of subjective utopian visions of world peace and equality. In addition, he was also influenced by religious discourse on eschatology. Driven by the peace movement, opposition to the Vietnam War, New Left discourses, and liberation theology from Latin America, many progressive Dutch Christians started to partly secularise their eschatological believes, thinking that working towards world peace and ending world hunger was bringing about the Kingdom of Heaven on earth.[104] In the words of James Kennedy:

> [T]he death of Jesus was just the beginning of salvation, it was mankind's

---

101  Van Steenbergen, 54.

102  Bart van Steenbergen, "Het kritisch toekomst denken van Arthur Waskow," *Katernen 2000* 2, no. 5 (1969): 15.

103  Bart van Steenbergen, "De toekomst in een maatschappij-kritisch perspectief," *Katernen 2000* 2, no. 9–10 (1969): 17.

104  Bart van Steenbergen and Eduard Van Hengel, *Technocratie: Ideologie of Werkelijkheid*, Euros-Boekjes 3 (Amersfoort: Werkgroep 2000, 1971), 5.

> task to bring it to fruition by fighting the existing structures. The attention shifted from the past (the death of Christ) to the future (the answer of humankind).[105]

The secularisation discourse of the 1950s, started by Karl Löwith and Arendt (see previous chapter), now returned, but with a twist.[106] Rather than seeing secularised salvation in term of an all-encompassing notion of progress, Van Steenbergen thought that the future (of salvation) would be realised by its breaking into the secular present. By confronting humankind with apocalyptic visions of future disasters, humankind found a moment in the present on which truly free action was possible—human action that could lead to either salvation or doom.

Another dimension of the social planning debate—far removed from futurist concerns—was the wish of policymakers for closer co-ordination of governmental departments—a desire in which they found allies with the sociologists of the Social Science Council, who saw opportunities to further establish their authority as government advisors and safeguard the unity of their scientific field. In 1965, the council's president Evert Willem Hofstee—a professor at Wageningen University—had already pleaded for increased co-ordination between government departments in reaction to the recent fragmentation of the social sciences into economics, sociology, political sciences, social geography, and social psychology. Hofstee thought that the rapid social change that affected the whole of society needed a comprehensive long-term vision of how the government could manage any potential bottlenecks in its development—something undermined by academic fragmentation.[107]

The issues to which the unity of social sciences was to provide the antidote, according to Hofstee, were similar to those that two years later would come to dominate the OECD agenda: "the growth of the population, technological development, industrialisation, growth of welfare, and the chang-

---

105 James Kennedy, *Nieuw Babylon in aanbouw: Nederland in de jaren zestig*, trans. Simone Kennedy-Doornbos (Amsterdam: Boom, 1995), 120.

106 Limitations in space and subject prevent me going deeper into the continuities between the secularisation debate of the 1950s and this later iteration. For more information see: Sjoerd Griffioen, "Contested Modernity: Karl Löwith, Hans Blumenberg and Carl Schmitt and the German Secularization Debate," PhD-Thesis (University of Groningen, 2020), chap. 7.

107 Evert Willem Hofstee, "De toekomst van de Nederlandse samenleving," in *Wegwijzers naar een goed bewoonbaar Nederland : beschouwingen aangeboden aan mr. J. Vink bij zijn afscheid als directeur-generaal van de Rijksplanologische Dienst* (Alphen aan den Rijn: Samsom, 1967), 30–35.

ing norms and values within society."[108] Hofstee's concerns were similar to those of Habermas as, like Habermas, he considered that with the advancement of technology, the government had both the power and the duty to guide the developments of social values in the future. These similarities are certainly not coincidental. Hofstee was active as advisor to the OECD and he expressed his view in a report written for the OECD conference in June 1966 alongside luminaries such as Raymond Aron, Ralf Dahrendorf, and Robert Oppenheimer, all anticipating the emergence of concerns for the social side-effects of economic growth.[109]

Soon after these concerns were formulated by Hofstee, the Social Science Council decided to collaborate with high-level Dutch civil servants to design strategies to tackle them. The resulting committee was led by the departing CPB director Pieter de Wolff and consisted mostly of the directors of institutes that were already performing planning tasks, such as Theo Quene of the Spatial Planning Bureau and J. Ch. W. Verstege of the Central Bureau of Statistics.[110] Van Tienen, as head of the research department of the Ministry of Culture, Recreation, and Social Work, was also a member, as well as Hofstee himself. The character of the committee had consequently more of a policymaking than scientific nature. Adhering to both the call for well-being indicators and the stimulation of future images, the committee came up with some far-reaching proposals for reforming the state-apparatus. The De Wolff-Committee proposed, in addition to the existing CPB and Spatial Planning Bureau, two more planning agencies: a social and cultural planning bureau, and a super planning agency that could oversee and coordinate all the activities of the other planning bureaus. The latter would be part of the Ministry of General Affairs and directly report to the prime minister. The idea was that the prime minister would function as a "*primus inter pares*" of all the various planning programmes, whilst a further planning council would monitor and advise the super plan agency, meeting its scientific and

---

108 Evert Willem Hofstee, "Rapport van de werkgroep uit de contactcommissie Overheid-Sociaal Wetenschappelijke raad" (The Hague: Sociaal Wetenschappelijke Raad, June 1965); See also: Den Hoed, "Een Keur van Raadgevers," 150.

109 Advisory Group on the Social Sciences, *Social Science and Government: Policies and Problem* (Paris: OECD, 1966).

110 The Spatial Planning Bureau (Rijksplannologische Dienst) was the continuation of the State Service of the Nation Plan (Rijksdienst voor het Nationale Plan) founded in 1942 under Nazi occupation. This agency has its own complex history, which I will leave undiscussed, see or further reference: Sabine Micheels, *15 mei 1941: De oprichting van de Rijksdienst voor het Nationale Plan* (Delft: Delftse Uitgevers Maatschappij, 1978).

democratic needs.[111] In this manner, large overarching planning lines could be developed in interaction with the other subordinate planning agencies, allowing for the coordination of basically all government policies between government departments.

However, after the publication of the final report of the De Wolff-Committee, Van Steenbergen scolded the elitist character of the plans for paying no attention to questions of social protest and democratisation. Moreover, he judged the committee and their proposal of a system of planning agencies as a continuation of retrospective planning and consensus-driven politics.[112] He had a point, as the new system of planning agencies was indeed formulated in the consensus-driven culture that had characterised the 1950s. The idea of competing social organisations attempting to influence the state that Koselleck adhered to was nowhere to be found. His assertion that the committee paid no attention to the social protests that had emerged in the Netherlands was, however, misguided. For example, Van Tienen had pointed out in an internal memo of the committee that the future societal structure that social planning sought to achieve would strongly affect democratic institutions. Consequently, he argued, the future form of democracy was an important part of social planning.[113] Finding forms of democracy akin to the new emancipatory spirit of the 1960s was thus very much part of the goals of social planning. Quene even brought the theories of Habermas on technocracy and deliberative democracy to the table. Although he lamented in a later interview that his fellow committee members either did not completely understand the theory, or did not seem to fully care.[114]

The demands for democratisation to which the De Wolff-Committee was reacting, had begun with the rise of a strong counter-culture in the urban areas of the Netherlands at the start of the 1960s.[115] The Provos, an Amsterdam anarchist movement, organised so-called happenings deliberately designed to provoke strong reactions from the Dutch conservative bourgeoi-

---

111 Pieter de Wolff, *Rapport van de Commissie Voorbereiding Onderzoek Toekomstige Maatschappij-Structuur* (The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1970).

112 Bart van Steenbergen, "De Wolff En de Wetenschappen," *Katernen 2000* 4, no. 2 (1971).

113 "De behoefte van het Ministerie van C.M.R. aan perspectivistisch onderzoek", Louis van Tienen, May 1968, NL-HaNA, CPB, 2.06.093, inv.nr. 471

114 Jan Buevink and Paul Den Hoed, "Interview Theo Quené," in *Op de brug tussen wetenschap en politiek: WRR 35 jaar* (Amsterdam: Amsterdam University Press, 2007), 16.

115 James Kennedy, *Building New Babylon: Cultural Change in the Netherlands During the 1960s* (Iowa City: University of Iowa Press, 1995), 138–50.

**Figure 4.2 "Ed van Thijn, chairman of the PvdA party, negotiates with Maagdenhuis occupiers", Amsterdam 20 May 1969,** *Algemeen Nederlands Persbureau*

sie and state authorities. Provo's founder—the charismatic and self-declared smoke magician Jasper Grootveld—fulminated against the negative influences of consumer culture, symbolised above all by the tobacco industry. He organised semi-ritual gatherings around the statue of The Darling (*Het Lievertje*) on the Spui square in Amsterdam, as the statue was co-financed by a tobacco industrialist. Provo promoted self-organisation to deal with the social issues facing Amsterdam, for example, reacting to environmental issues such as the increase of automobiles in the city by painting unused bikes white and declaring them public property, a free means of transportation. Their provocations proved successful: The progressive elite was shocked by the harsh and violent reaction of the police to the Provo protest, bringing about a severe questioning of state authority.[116]

In 1966, a group of young radicals of the Labour Party, calling themselves the New Left, published their first manifesto with the goal of pushing the Labour Party in a more progressive socialist direction. Published on the eve of the Labour congress, it demanded more development aid, the recognition of the German Democratic Republic (DDR), and the Vietcong, new progressive taxes, but also the democratisation of Dutch society, stating:

> [A] political democracy in a socialist state can only become a reality if […] everyone is given the opportunity to take part in the decision-making process. […] The type of participation the average citizen has in parliamentary politics should roughly be extended to the lower levels of government.[117]

According to the New Left, democratic decision making had to be introduced in parts of society where it had previously been absent: corporations, and public and semi-public organisation—from factories and psychiatric wards to universities and public housing.

As Kennedy has famously argued, the social reforms and changing attitudes of the Dutch public towards democratisation and social well-being should not be explained as primarily stemming from the political pressure of a younger generation, but rather, from the flexible attitude of the ruling elites who interpreted the upheavals of the Provos and the New Left as the signs of larger developments to come, thus making this change in a self-ful-

---

116 Virginie Mamadouh, *De stad in eigen hand: Provo's, kabouters en krakers als stedelijke sociale beweging* (Amsterdam: Uitgeverij SUA, 1992), 54–58.
117 Hans van den Doel et al., *Tien over Rood: Uitdagingen van Nieuw Links Aan de PvdA* (Amsterdam: Polak & Van Gennep, 1966), 21–22.

filling prophecy.[118] Consequently, elites quickly rallied behind the call for democratisation and started to design new policies around them, involving social movements in their implementation. For example, when students occupied the Maagdenhuis, the administrative centre of the University of Amsterdam, demanding the democratisation of the university system, the Labour member of parliament, Ed van Thijn, went to discuss things with them (figure 4.2).

The De Wolff-Committee encapsulated the willingness of ruling elites to engage with social protest, designing elaborate policies and proposals to incorporate social groups into planning programmes. For example, less than a year after the occupation of the Maagdenhuis, the philosopher Jan Nittel, a senior advisor to the Ministry of Education and Science, argued in the meetings of the committee that the democratisation of schools and universities was an issue that the future planning agencies had to tackle.[119] These social scientists acknowledged that simply more planning was not the answer to the problems of the future and that instead more democratisation was necessary. As in the Western German discussion, Dutch scholars thought that if such a programme for democracy was to succeed, scientific planning was going to be instrumental in providing a shared horizon of society upon which a shared vision of the future could be formulated.

In contrast to Kennedy, Ido Weijers and Duyvendak have, quite independently, explained the willingness of political elites to adhere to the wishes of a younger generation, not so much demonstrating a flexibility to go with the winds of historical development, but rather as the continuation of the personalist approach propagated by Banning and the Utrecht School.[120] For Duyvendak, this was also the Achilles heel of social planning: The emphasis on collective social organisation and a collective future that new social planners such as Van Tienen and Hofstee were propagating was a uncomfortable match for the individualistic orientation of the older planners and social scientists.[121] However, the inherent tension in the Dutch planning ideal is, in my opinion, exaggerated. The guiding principles of the personalist ap-

---

118 Kennedy, *Nieuw Babylon*, 125–28.
119 "Verslag van de derde bijeenkomst van de Commissie Voorbereiding Onderzoek Toekomstige Maatschappijstructuur", 12 June 1968, NL-HaNA, CPB, 2.06.093, inv. nr. 471
120 Ido Weijers, "De binnenhuisarchitecten van de Nederlandse verzorgingsstaat. Menswetenschappers en doorbraak," *Gewina: Tijdschrift voor de Geschiedenis der Geneeskunde, Natuurwetenschappen, Wiskunde en Techniek*, no. 24 (2001): 196–206; Duyvendak, *De Planning van Ontplooiing*, 24–26.
121 Duyvendak, *De Planning van Ontplooiing*, 104–6.

proach had already largely disappeared under a new conception of historicity. Moreover, as Van Tienen's statements above attest, sociologists were aware
of this tension and considered social planning the ultimate answer, bringing
together a plurality of future images into one large state vision.

## 4.5 Futurist Models and Future Imagination

As the critiques of Habermas and Van Steenbergen made clear, the mode of
economic planning which the CPB had developed in the 1950s had run out
of stream. The conditions of planning had changed: The individual agent
was no longer the only actor, as the emphasis shifted towards the different
social groups within society. Consequently, mapping out multiple scenarios
of the future no longer sufficed, as the future itself was more open and the
value commitments of different social groups had to be considered. Moreover, the focus on economic prosperity alone now seemed short-sighted.
Rather, broad social well-being had to be the goal, encompassing social,
technological, and environmental developments. These developments were
not solely a question of the focus of planning models, but concerned the core
of what a planning model was all about. The macroeconomic and decision
models that the CPB employed in the 1950s were simply not built to address
these issues. Instead, long-term models were necessary that could democratically incorporate all of the different societal values and visions of the future.

In this and the following section, I will discuss the development of new
models that attempted to tackle these issues in both the De Wolff-Committee and the CPB. As I will argue, two tools proved particularly helpful: Simulation techniques were able to combine norms and facts, whilst cybernetic
systems conceptualised democratic decision making as a system of feedback
loops. The promise of a single vision for the future development of society
through the engagement of a plurality of voices was an elegant idea, but
presented a herculean task to put into practice. Planning models were not
only important here since they gave these ideas a concrete form, but also as
they allowed planners to imagine how the state could best act through "the
labyrinth of movement."

Contrary to Van Steenbergen's critique, the members of the De
Wolff-Committee were aware that the older planning methods would no
longer suffice for the ambitious reform agenda they had presented. However,
continuing the modus operandi of the CPB, the committee was convinced
that the coordination of multiple departments, planning bureaus, and gov

ernment councils could only move forward on the basis of formal scientific models. As will become clear in the following section, they tasked the CPB early on with the development of a "super model" that could oversee all of the coordination efforts of the proposed "super planning bureau". Yet, the committee also developed its own models as testcases of what might be possible with the new models. One of these Nittel called a "*futurist model*", by which he meant a model based on the theories of futurologists. In the second meeting of the committee, he argued that such a model could help the committee in sketching the tasks that had to be covered by planning agencies.[122] The task of developing such a model fell to Van Tienen, who developed an outline the model with the assistance of his colleague Alam Darsono, the result of which he presented at the next meeting.[123]

Van Tienen and Darsono's plan is a valuable document, not least for its elaborate introduction, in which the authors indicate the differences between a futurist model and older planning models, and for the "futurist epistemology" they provide as fundamental to their model.[124] The first difference they note is that no precise estimations are to be expected from a futurological model. Rather, its goal is to "identify future problems or to understand the dynamics of a society,"[125] with the additional aim of providing the basis for decisions by administrators. According to Van Tienen and Darsono, the fundamental tenet of a futurist epistemology was the idea that truth was always relative to its target system. Indeed, on this very point they assert: "We can only determine whether a specific statement is meaningful, i.e. whether it is a truthful or false statement, within a system of statements of which the statement in question is part."[126] Consequently, for the futurologist, the truthfulness of a prediction could only arise in a model system, which was an artefact and did not hold any truthfulness on its own. This made the model itself, rather than a candidate for truth or falsehood, a selection criterion. That is to say, whether a phenomenon can be modelled (or not) makes it a candidate for truth or falsehood. In this manner, Van Tienen and Darso-

---

122 'Bijdrage van de Nittel voor de vergadering op 21 mei 1968 van de Commissie "Voorbereiding Onderzoek Toekomstige Maatschappijstructuur"', Jan Nittel, undated, NL-HaNA, CPB, 2.06.093, inv.nr. 471

123 "Verslag van de tweede bijeenkomst van de Commissie Voorbereiding Onderzoek Toekomstige Maatschappijstructuur", 21 May 1968, NL-HaNA, CPB, 2.06.093, inv.nr. 471

124 "Schets van een Futurologisch model" by A. Darsono and A.J.M. van Tienen, found in: NL-HaNA, CPB, 2.06.093, inv.nr. 471

125 Darsono and Van Tienen "Futurologisch Model," 1

126 Darsono and Van Tienen, 2

no contented, modelling rules had to exclude "future fantasies"—i.e., statements too fanciful to be modelled.

These modelling rules—the methods, techniques, and procedures that were used to model phenomena—formed the futurist epistemology, meaning the system that determines truth and falsehood. In their outline of this epistemology, Van Tienen and Darsono argued that modelling had to start with the description of the phenomenon within clear temporal dimensions. Subsequently, the phenomenon had to be described in a context that related to other phenomena under consideration. In the following step, these relationships were to be expressed as variables. Changes in the phenomenon over time were then to be expressed in an equation describing a curve. Such a curve can subsequently be "fitted" through the use of empirical data, meaning that a shape of the curve was found which would best fit a series of data points.

So far, the epistemology sketched by Van Tienen and Darsono was not fundamentally different from the methods of the CPB. However, what set the futurist method apart was its lack of an overarching theory. Considering the theories that could be used to transform phenomena into fitted curves, the model was pluralistic. Each theory was allowed as long it contained a temporal dimension and was capable of quantifying the phenomenon in question. As such, the futurological model was not bound to one discipline, but could incorporate in principle scientific insights from each field. The real magic of the model was what happed after the phenomena were modelled. Using a computer to extrapolate the trends of the projected curves, it was possible to investigate the interaction between the different equations of the model. Using these simulation runs, the model rendered new relationships between the modelled phenomena that were not provided by the theories used in the modelling process itself. These were *theory-less* relationships. Moreover, the totality of relationships between the modelled phenomena that the computer provided were too complex to be described by a single overarching theory.

Van Tienen and Darsono's futurist model was a simulation model. Epistemologically, it lies somewhere between experiment and representation. It represented an external reality in its mathematical rules and predicted the development of that reality in the future using time-series data. Simultaneously, the world that the futurist model represented was completely artificial: It was not meant to render realistic predictions (only the assumptions had to be realistic), but rather was intended to explore and find new possibilities—new relationships between social phenomena that might emerge in the

future, but were not yet (or never will be) a reality.[127] In that sense, the model worked more like an experimental system in the natural sciences, rendering surprising events that could in turn be converted into a model representation of their own.[128]

Although Van Tienen and Darsono did not completely share the epistemic aims of Van Steenbergen and his aspirations for a future consciousness, the model did adhere to basic principles of the prospective method. It was not the model's aim to make statements on the extrapolation of current trends. Rather, its aim was to discover future relations—i.e., how current trends form in new, future possibilities—also creating new possibilities and moments in the present. Like Van Steenbergen's plea for prospective prognosis, the futurist model's main aim was to imagine the future in a manner different than as a straightforward continuation of the future. As the futurist model had as its only selection criteria the modelling rules and no external reality, wishful scenarios could be modelled just as effectively. As a representation of an artificial world, the mixing of normative and factual judgement was no theoretical problem. In that sense it adhered to Habermas plea for the combination of subjective values and objective facts. Concluding, the model reflected the debates on social planning in which it found expression in simulations: It presented a future in which unprecedented events could happen. These unpresented events were radically new, yet were rendered (at least partially) knowable through simulations.

## 4.6 System Dynamic Modelling at the CPB

The CPB had a large stake in the De Wolff-Committee. Not only was the director, Cees van den Beld, part of the committee, the chairman, De Wolff, was also the former director of the bureau. Additionally, R. Ruiter, the head of regional planning at the CPB, was the secretary of the committee. There was an explicit hope within the board of the CPB that the committee would adopt the recommendation of installing other scientific advisory councils

---

127  The futurist model was consequently opened up a space of experimentation. For the idea of computer simulation as experimentation, see: Eric Winsberg, "Simulated Experiments: Methodology for a Virtual World," *Philosophy of Science* 70, no. 1 (2003): 105–25.

128  For an analysis of how simulation can render an epistemic moment in an experimental system, see: Hans-Jörg Rheinberger, "Preparations, Models, and Simulations," *History and Philosophy of the Life Sciences* 36, no. 3 (2015): 330–33.

that would follow the example of the CPB, meaning policy assessments made on the basis of model-based forecasting.[129] However, as became clear during the meetings of the committee, the ambitions of the proposed new planning bureaus went much further. Especially the founding of a super planning bureau would require planning models that would do much more than simple policy analysis: It had to coordinate policies across multiple departments, based on the scientific insights of many scientific disciplines, and also allow for the influence of social organisations.

It soon became clear that the CPB's old planning ideal would not fulfil the aims of the De Wolff-committee. Therefore, even before the committee had completed their task, the CPB began to research and develop a technique that could perform the feat of assessing and coordinating all government policies. The committee envisioned that the super planning agency would work with one central model in the same manner that the CPB used a large macro-econometric model as a framework for all its planning activities. Unofficially, the CPB was promised that they would develop the first such model, so the super planning agency could immediately start with their task once installed.[130] Rather than proceeding from the usual economic modelling template, the CPB decided first to investigate the modelling techniques of futurology and futurism. In 1970, under the heading *Ten Studies of the year 2000,* an internal research group produced notes on the works of, amongst others, Helmer, Kahn, Jantsch, and even Van Steenbergen, as the basis for a new model.[131] The modelling technique that made the biggest impression on the CPB planners was Jay Forrester's *system dynamics*, especially as presented in his 1961 *Industrial Dynamics*. Soon after, the project would give its undivided attention to Forrester and his modelling technique.[132]

Forrester had developed his system dynamics modelling technique in the 1950s whilst working on the Semi-Automatic Ground Environment (SAGE) system—a computerised US military system used for the interception of enemy missiles and the automatic targeting and firing of counter

129 "Notulen van de D-H vergadering van 23 juni 1969", NL-HaNA, CPB, 2.06.093, inv.nr 41.
130 "Notulen van de D-H vergadering van 12 mei 1968", NL-HaNA, CPB, 2.06.093, inv.nr 41.
131 "Tien Studies over het jaar 2000" research note by R.J.P van Glinstra Bleeker, 3 January 1970), NL-HaNA, CPB, 2.06.093, inv.nr 427.
132 "Foreester's simulatiemodellen als hulpmiddel tot een betere maatschappijstructuur" (Part I-IV) research notes by R.J.P van Glinstra Bleeker, 19 December 1972, NL-HaNA, CPB, 2.06.093, inv.nr 427. Jay W. Forrester, *Industrial Dynamics* (Cambridge, MA: MIT Press, 1961).

missiles, and was as such a typical product of Cold War rationality.[133] The SAGE system gathered radar data from a variety of sources (mostly satellites) and then integrated this information into a single picture that could be used to direct the missile system's response. Given its function in controlling a huge apparatus, system dynamics relied heavily on feedback loops. That is to say, the output of the system is routed back onto itself as an input, altering its output on the basis of the changes of the information in the input-output loop. These two characteristics, integrating a variety of information into one picture and controlling information flows through feedback systems, came to define system dynamics. These were also the characteristics that appealed to the CPB.

Moving from SAGE to the MIT Sloan School of Management, Forrester started to investigate the development of US industry. His dissatisfaction with existing economic models used to research industry inspired him to apply his own modelling methods.[134] According to Forrester, the existing economic models were both unrealistic and too simple, and hence they were not capable of processing or interpreting the enormous flows of information that were circulating in industrial supply lines—something for which his system dynamics models would be much more adept. Although Forrester's models started out as detailed descriptions of how a supply line functions and what kind of information flows it entails—information on orders, output, prices, costs, quantities of material, distribution, travelling distances, etc.—the goal of the model was not to provide an accurate representation of how an industry functioned, nor was it meant as forecasting tools. Rather, Forrester saw his models, first and foremost, as educational tools for managers. By mapping and studying the flow of information, managers could enhance their sensitivity to delayed or misleading information flows. Modelling allowed managers to spot issues and bottlenecks, and to come up with solutions.[135] It is therefore unsurprising that the idea of the model not as a forecasting technique, but as a learning tool, resonated with the ideal of the creation of future visions for citizens that had developed in the Dutch planning discourse. Although Forrester's models lacked democratic ambition—strongly steeped, just like the old-school planners, in Taylorism—like the futurist philosophies, system dynamics was intended to enhance the sub-

---

133  Edwards, "The World in a Machine," 229–31, 236–39.
134  William Thomas and Lambert Williams, "The Epistemologies of Non-Forecasting Simulations, Part I: Industrial Dynamics and Management Pedagogy at MIT," *Science in Context* 22, no. 2 (2009): 250.
135  Thomas and Williams, 253–59.

ject's capacity to act.

In 1970, just when the De Wolff-Committee was about to wrap up its activities, a team of CPB employees led by the young researcher Jos Kok started to work on an "integral model" using the system dynamics technique. By that time, the board of the CPB was convinced that the government would approve the establishment of a general planning bureau, and the board was hopeful that they could provide the overarching model for the future agency. The integral model was intended as that model.[136] Kok and his colleagues were aware that system dynamics was a "very different beast" to the usual macroeconomic models that the bureau was generally producing. A research note from the team, dated 12 September 1972, lists a number of areas in which system dynamics differed from more traditional economic models. Not only did the models have no need of exact estimated coefficients—at least not in the early stages of modelling—but also, whereas the relations in a macroeconomic model had to be empirically observable, those same relations in system dynamics could remain purely theoretic.[137] However, the most significant difference between the modelling techniques, Kok noted, was that system dynamics was a computer-based simulation technique and, therefore, had a more experimental character than standard macroeconomic models.[138]

The procedure of finding new relations within a simulation, rather than deducing relations from theory or inducing from time-series data, was a novelty within the CPB. Just like the model by Van Tienen and Darsono, the integral model departed from a set of initial simple estimates. Translated into a series of differential equations, not burdened with the demand of exactitude, they were run through a computer, temporally extrapolating the trends, to see how the trend would develop and interact with other trends. These findings could then, in turn, be modelled again and used as input for a new series of simulations—in other words, as a feedback loop. Through the repetition of these procedures, new relations could be discovered from a corpus of theoretical knowledge.

The semantics of system dynamics made it quite easy to incorporate

---

136 "Notulen van de D-H vergadering van 16 november 1970", NL-HaNA, CPB, 2.06.093, inv.nr 41.

137 Research note by Fred Lempers, 12 September 1972, "Voorlopige opzet van een systeem-dynamische aanpak van een Intergraal model voor Nederland", NL-HaNA, CPB, 2.06.093, inv.nr. 423.

138 R.J.P van Glinstra Bleeker "Forester's simulatiemodellen als hulpmiddel tot een betere maatschappijstructuur" (Part I-IV) 19 December 1972, NL-HaNA, CPB, 2.06.093, inv.nr 427.

knowledge from many fields of science. As long as the knowledge could be expressed in information flows, the language of the modelling technique was versatile enough to express many types of relations (see figures 4.3 and 4.4 for examples of how such flows looked like). More important still was the fact that the basics of the technique were not that complicated. As the previously mentioned research note remarks: "Apart from the fact that an existing system dynamics model is easy to grasp for a layperson, he can also quickly build a model himself by using this method."[139] System dynamics used a series of notational conventions inspired by the schematics used in electronics that could be used to draw the relation of the model. This did not entail the use of mathematics, nor did it require the user to specify the quantified relation of the elements. Drawing was a more intuitive activity, exploring the relation through schematic representation and grasping the elements as they relate to the whole. Furthermore, it was easy to learn. The model, therefore, had the potential to be used by citizens, politicians, and representatives, allowing for the creation of personal value-laden visions of the future.

To explore the versatility of his new model, Kok organised panels with experts from fields such as demography, sociology, spatial planning, and environmental studies.[140] Using system dynamics, the experts sketched out how developments from those fields could relate to the economic phenomena.[141] When the experts were not in the position to learn the system dynamics method, the CPB employees could assist by rendering the opinion of the expert into the model schematics. To this end, Kok and his colleagues had developed methods to translate verbal information into model relations. Using a sketchpad, they checked whether the experts could recognise the visual representation of their opinion, ensuring the adequacy of the relations in question. Using the above-described simulation procedures, the findings of the simulation were again presented to the expert who provided new input for the model, creating a feedback loop between expert and model. If the model yielded believable results, the model could be further refined, using available data to make more exact estimations of the coefficients. It proved, as with the Delphi technique developed at RAND, that system dynamics was

139 "Forrester's modellen als hulpmiddel tot een betere maatschappijstuctuur" research memorandum by V. Glinstra van Bleeker, February 12, 1973, NL-HaNA, CPB, 2.06.093, inv.nr. 428.
140 Kok discussed this approach in the development of the integral model in a 1973 research note: "Naar een Integraal model" found in: NL-HaNA, CPB, 2.06.093, inv. nr. 428.
141 'Economisch deel integraal model' Jan Sandee, 21 August 1973, NL-HaNA, CPB, 2.06.093, inv.nr. 428.

remarkably well suited to integrate diverse expert opinion into one unified opinion.[142] It was thus also a tool for consensus making. Through such a process, Kok theorised, the relations of the model would become more stable over time. It was his idea that a system dynamics model in its final stages would more resemble the classic macroeconomic model with its precisely defined relations.

Even if the research team only experimented with expert knowledge, there were plans to incorporate information from non-scientists in system dynamics-type models as well. Plans for local participation were made for the inter-ministerial working group for the Integral Structural Plan for the north of the Netherlands—an ambitious package of policies intended to stimulate economic development in the three northern provinces, in 1965.[143] The CPB was tasked with the organisation of the economic policies in the working group and to work out elaborate coordination schemes to adjust all the policies with provincial and local municipalities. Part of these coordination efforts was to investigate how the planned policies would interact with each other. To this end, the input of locals was deemed informative. Unfortunately, however, these plans never left the drawing board. A report on the matter from March 1974 simply claims that, although local feedback is desirable, the working group lacks the time and means to organise it.[144]

By 1972, a working prototype of the integral model called MIPPA (Model for Integration of Partial Planning Activities) was ready. Although Van Tienen had already pioneered the use of systems modelling and simulation techniques for a futurist model, it was the CPB that developed these methods into a model that had truly democratic ambitions. It also sedimented the relation between the new planning ideal and cybernetic models. In the model, democracy was to be understood as the process of interaction between the planner and a variety of experts, citizens, and other social organisations. This interaction slowly brought the model to a more fixed state, the outcome of the process being a consensus on what type of future society was wanted, and what government policies had to achieve. The interactive process could itself be described in the model as a process of feedback loops. Just like actors in a cybernetic system were constantly anticipating the movement of

142 Andersson, *The Future of the World*, 85–90.
143 "Doel werkwijze en organisatie van Integraal structuurplan voor het Noorden des Lands" memorandum by the Secretariat of the ISP, May 1974, NL-HaNA, CPB, 2.06.093, inv.nr. 474.
144 "Taak en Werkwijze van de werkgroep Integrale Planning" March 1974, NL-HaNA, CPB, 2.06.093, inv.nr. 475.

other actors, resulting in a state of equilibrium, planners, citizens, and social organisations were providing input on the basis of their own images of the future, adjusting those images on the basis of the outcomes of the model. Meanwhile, the model would move to a state of equilibrium. Although the model had in common with the earlier decision models the cybernetic imagine of society, the concept of the formation of public opinion through feedback loops was completely different from the idea of public opinion as aggregated individual preferences. Consequently, the resulting image of democracy was inherently different: more deliberative and more open, yet still bound to the rules and capabilities of the planners' model. In this sense, this conception of democracy found a connection with the broader discussions on democracy.

The MIPPA model seemed to encapsulate the planning ideal that Koselleck and the social planners had sketched: A multiplicity of temporal dynamics could, with a minimum of theoretical background, be brought together into one coordinated scheme. Although the model did not speak explicitly of the relationship between state and society, its workings can be interpreted as an image of this relationship. Central planners could assist a plurality of social organisations in formulating their desired future. The task of the state was to bring these futures into one system that would grow more stable over time. However, it is important to note that the model did not live up to all the democratic ambitions formulated during this period. It was still very much a consensus-driven technique that kept ideological differences at bay. The model adhered to the fourth tenet of the Club of Rome that future problems had to be solved outside of ideological strive. Contrary to Koselleck's ideal, social organisations were not so much competing over state power as they were collaborating with state power. Also, the conception of deliberation contained within the model was still very much state-led and built on the image of the communication and exchange of information as electronic currents in an electrical system. It therefore failed to live up to the openness and the idea of the shared horizon Habermas had promised.

## 4.7 The Failure of System Dynamics

It was remarkable how eager the CPB was to let go of their earlier economic modelling practices to facilitate this emerging new planning ideal. By the time of the completion of the prototype, however, problems outside and inside the CPB started to plague the further development of the model, which

undermined the bureau's willingness to experiment any further. As a result, the model was never put into practice for its intended purpose, namely, the creation of a long-term democratic vision of the future in a super planning agency. Integrative system dynamics modelling was ultimately a failure, at least with regard to its original intent. Yet, indirectly, the techniques behind the model and the image of society it propagated proved to have a lasting influence, especially with regard to environmental policies (as discussed in chapter six). In this final section, I now analyse the successes and failures of the CPB's new planning programme and sketch its larger impact on planning and policymaking.

In 1970, despite positive early (albeit unofficial) reactions, the government was divided on how to implement the recommendations of the De Wolff-committee.[145] Thinking about this implementation was put on the agenda of another policymaker committee, the Van Veen-committee, who were tasked with the reorganisation and re-division of ministerial tasks. With the new committee, however, the idea behind the general planning bureau started to change. The general planning bureau was renamed the Scientific Council for Government Policy (Wetenschappelijke Raad voor Regerings-beleid, WRR) and became more independent, both from the other planning bureaus and, by virtue of being no longer tasked with coordinating the planning bureaus, from ministerial activities. Instead, its task became solely the identification of future long-term issues.[146] The working group that founded the WRR, at least initially, still retained the idea of a model-based approach, but with the reformulation of its task, it became unclear who had to develop the model: the working group of the WRR or the CPB—this despite earlier promises that this task would fall to the CPB. As it became clearer that the WRR wanted to develop a model of its own—before dropping the idea altogether—the CPB board grew increasingly frustrated, complaining that it was a great loss that the council did not want to make use of the modelling expertise of the bureau.[147]

As the WRR was no longer interested in an integral model, the purpose of the model shifted. The board played around with the idea of using it as the central model for policy assessment and the drafting of the central economic

---

145 "Geleidende Brief bij Rapport van de Commissie voorbereiding onderzoek toekomstige maatschappij-structuur" 17 September 1970, Tweede Kamer der Staten-Generaal, kamerstuknummer 10941, nr. 1.

146 Den Hoed, "Een Keur van Raadgevers," 159–62.

147 "Notulen D.H.-vergadering van 9 april 1973", NL-HaNA, CPB, 2.06.093, inv. nr 41.

plan—a function previously fulfilled by their large-scale econometric models. Ultimately, however, this application also fell through and working on the model was relegated to a special division on long-term research (which ultimately only served to provide background studies for the medium-term forecasts). The final stumbling block for the model proved to be the organisation of the CPB itself. Although the bureau had shown to be very willing to listen to new social demands, its organisation (rather ironically) proved to be quite inflexible when new ideas on emancipation and democratisation took hold in the CPB itself. Female typists demanded more career perspectives and female computer programmers, writing their first research notes for the bureau during this period, demanded more recognition for their scientific work. The CPB board had no idea how to deal with these demands and quickly moved the protesting female employees to different government departments.[148] Likewise, the research group led by Kok started to demand a more horizontally organised bureau—a demand that the board was very unwilling to adhere to. Gradually, it became clear that democratisation was desired, but only if it happened outside of state bureaucracy.

Kok realised that if he wanted to build upon the MIPPA model, he needed more human resources and a different way of organising research. He prepared a report in which he proposed a rather drastic reorganisation of department IV of the CPB—the department for which he worked.[149] He made a plea to change from a vertical organisation form to a more horizontal one. Kok's reorganisation plans came at a moment when there was significant dissatisfaction within department IV about the management of the board. At a staff meeting on 7 December 1972, employees handed out a list of grievances to the assembled board. The staff had two main complaints: First, employees received too little credit for their scientific work. Research notes were not published in journals and only the "big shots" within the bureau published under their own name, even if they used the work of their lower-level collegues. Second, the employees wanted more freedom in the subjects they choose to research, asking for more flexibility in moving to new subjects if their interests led them there.[150]

At the time, the organisation of the CPB was very hierarchical. The bu-

---

148 "Notulen D.H.-vergadering van 12 februarie 1972", NL-HaNA, CPB, 2.06.093, inv.nr 41.
149 "Taak en werkwijze van de werkgroep Integrale Planning" memorandum by Jos Kok, March 1974, NL-HaNA, CPB, 2.06.093, inv.nr 412.
150 "Verslag vergadering hoofafdeling IV op 7-12-1972", NL-HaNA, CPB, 2.06.093, inv.nr 425.

reau was divided between four departments coordinated by the board, with each department subdivided into a research group working on a specific subject for a length of time, varying between a couple of months, to several years. All of the subgroups were coordinated by a department head, who was also part of the board. Each department had its own speciality and employees who worked in one department rarely moved to another. Kok's proposal suggested re-organising the bureau into smaller research units, in which the scientific employees would rotate from the research unit on a regular basis. Scientific employees would no longer specialise in one subject, but gain knowledge on a broad range of topics. It was argued that by rotating in this way, employees would take the knowledge and skills from their previous research unit with them, which would foster new ideas and creativity in their new research units. For the statistical staff, a similar set-up should be implemented with the exception that statistical employees were allowed to stay on one team and specialise in one subject if they wished to.[151] This meant that the old organisational structure of the bureau, in which research groups would report to their department heads, and the department heads and director would coordinate the research groups, would become redundant, thus replacing the vertical organisation with a more horizontal one.

This plan for a new organisational structure was directly connected to the functioning of the integral model. According to Kok, working on a diverse set of subjects, as he himself had done working on the MIPPA model, would directly benefit the functioning of the integral model. Moreover, the rotation of the employees would facilitate communication and collaboration between different research fields that the integral model required.[152] In line with its more democratic ideals, the integral model thus facilitated a more horizontal and democratic organisational form.

Unsurprisingly, the reorganisation proposal by Kok and members of department IV was too far-reaching for the CPB board. Also, the horizontal spirit was not as alive in the other departments of the CPB as it was within department IV, perhaps due to having clearer distinct identities—department IV had remained a veritable "potpourri" of different research interests.[153] The board did promise more flexibility, responding faster to requests for transfers to other scientific teams, instigating a publication series in

---

151 "Verslag vergadering hoofafdeling IV op 22-01-1974", NL-HaNA, CPB, 2.06.093, inv.nr 425.

152 Ibid.

153 At least this is suggested in a board meeting, see: 'Notulen D.H.-vergadering 4 maart 1974', NL-HaNA, CPB, 2.06.093, inv.nr 41.

which CPB employees could publish, and putting an end to the practice of superiors using the uncredited material of their colleagues . None of the departmental rotation suggestions Kok made were accepted.[154]

Another development that further expedited the side-lining of the integrative model was the increased popularity of another modelling technique within the CPB: *neoclassical growth modelling*, of the kind developed by Solow. As explained in section 4.1, Solow's models had paved the way within the OECD for a more integrative approach to economic growth policies, incorporating science and education policies. In the early 1970s, CPB planners sought to extend the integrative qualities of the growth models by incorporating environmental and social issues. As such, neoclassical growth modelling was a direct competitor of system dynamics modelling, even if it lacked truly long-term prognostic capacities and the collaborative spirit. With the problems plaguing the system dynamics approach, this battle was eventually won by neoclassical growth modelling. However, this did not mean that the social planning issues around which the system dynamics model was designed simply disappeared. In fact, using system dynamics helped to integrate environmental issues into the neoclassical growth models.

Although the initial modelling of the environment happened within the integral model research group, the first time that the government asked the CPB for advice on environmental issues was in 1971. In order to coordinate the implementation of new pollution norms for Dutch industry, the government installed the *Committee for the Macroeconomic Analysis of Environmental Protection* of which policymakers, business and labour representatives, and employees of the CPB and Spatial Planning Service were part.[155] The consultation of these parties and their integration into one cohesive vision of the future was facilitated by the techniques that Kok and his team had developed with system dynamics. For the analysis of the effects of the new norms, however, the bureau did not employ the system dynamics, but rather opted for an updated version of Wassily Leontief's input-output modelling—a technique the CPB had been familiar with since the 1940s.[156] Hence, early in its development, it was clear that the integrative model was not yet

154 'Notulen D.H.-vergadering 8 mei 1974', NL-HaNA, CPB, 2.06.093, inv.nr 41.

155 J. Passenier, *Van planning naar scanning: Een halve eeuw Planbureau in Nederland* (Groningen: Wolters-Noordhoff, 1994), 261.

156 Gerrit Zalm and Johan Verbruggen, "National Accounts and Modelling at the Central Planning Bureau," in *The Value Added of National Accounting: Commemorating 50 Years of National Accounts in the Netherlands* (The Hague: Netherlands Central Bureau of Statistics, 1993), 151–66.

up to the task of assisting a corporatist advisory committee in an economic analysis.[157]

As for the system dynamics part of the model that was already in place, the model took the environment as a separate division of the overall economic model, but connected the environmental variables with other variables of the model, albeit not necessarily in an economic manner. For example, more pollution meant a higher mortality rate, shorter life expectancy, and increased health costs. Moreover, pollution was also caused by more than industry alone—increased traffic and population growth also had an effect. In neither case were the economic effects of the pollution norms expressed solely in terms of the clean-up costs, but also in the investment in pollution-reducing new technology and increasing healthcare costs (see figure 4.3.). Although all of these variables were ultimately calculated with regard to their overall effect on the economy, the holistic approach to the environmental portion allowed for the environmental value beyond its purely economic value to be taken into account.[158]

Although further development of the integral model ceased in the mid 1970s, the more complex way in which system dynamics was capable of modelling the environment was not completely lost. In 1975, attempts were made to integrate elements of the system dynamics model into the input-output model of the environment. Using the simulation techniques of the model, "a richer system of relation" could be used in the model— to quote the CPB researchers (see figure 3.4).[159] In the resulting model, the pollution output by industry was much more "disaggregated", meaning that decisions on a micro level could be modelled as variables into the macro model. Analogous to a neoclassical production function, the pollution function was dependent on an investment function—the rate at which capital goods were replaced and the wage cost. Sources of pollution were also varied and, therefore, not only industrial output, but also the growth of the population was a factor. Similarly, the economic effects of pollution were not limited to cleaning costs alone, but also affected the replacement rate of

---

157  This approach was developed in 1973, but only published in 1974, see: Hans Den Hartog and A. Houweling, *Pollution, Pollution Abatement and the Economic Structure- Empirical Results of Input-Output Computations for the Netherlands*, CPB Occanional Papers 7 (The Hague: Centraal Planbureau, 1974).

158  "Voorlopige opzet van een systeem-dynamische aanpak van een Intergraal model voor Nederland", Research note by Fred Lempers, 12 September 1972, NL-HaNA, CPB, 2.06.093, inv.nr. 423.

159  "Het milieumodel", research note by A. Houweling, H.D. Nachtegaal and T.F.L. de Waal, 4 July 1975, NL-HaNA, CPB, 2.06.093, inv.nr. 362.

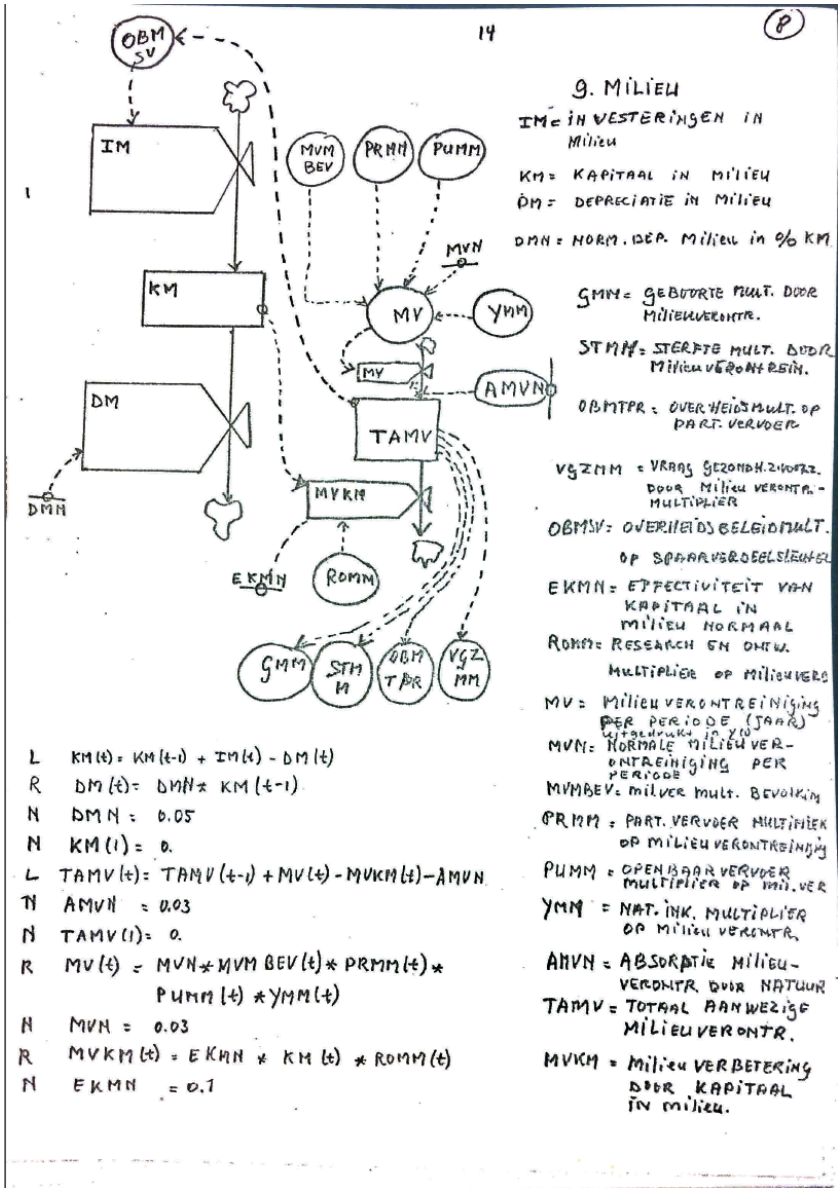Figure 4.3 "The environment part of the integral model", from: Fred Lempers, 12 September 1972 'Voorlopige opzet van een systeem-dynamische aanpak van een Intergraal model voor Nederland', NL-HaNA, CPB, 2.06.093, inv.nr. 423

**Figure 4.4** "Flow schematics of the environmental model", from a research note by A. Houweling, H.D. Nachtegaal and T.F.L. de Waal 'Het milieumodel', 4 July 1975, NL-HaNA, CPB, 2.06.093, inv.nr. 362

capital goods and the investment rate. However, the framework of the model remained strongly rooted in macroeconomics. An important variable in the model was Gross Domestic Product (GDP) and the manner in which prices and wages were determined revealed the macro-theoretical underpinnings of the model. Most important, however, was the fact that the environment was only valuable insofar as higher pollution norms added to (or indeed, subtracted from) GDP. In other words, being integrated into the neoclassical growth model, the environmental relations of the system dynamics method lost their holistic overtones and could ultimately be reduced to economic growth.[160]

System dynamics, or the simulation techniques derived from this approach, played an important role in the integration of the environment as a policy object into a macroeconomic framework. However, the environment was not the only policy object that could enter the macroeconomic framework through computer simulation: Science, education, public health, and a shift to the service sector all entered macroeconomic models throughout the 1980s. Computer simulation allowed the CPB to address the multi-faceted policy objects that came out of the discussions on the side-effects of economic growth in the long term. The use of such techniques enabled the discovery of new relations, even for entities where no empirical information was available. Yet integration was most successful when the new relationships it revealed could be coupled to well-established economic indicators. For example, environmental variables were only of interest as long as they could be coupled with the production function of neoclassical growth models.

The historical irony was that the integrative model emerged out of a discussion on the narrowness of economic prosperity and an attempt to formulate broader well-being indicators, but ended up being used to analyse a wide range of policy areas under the auspices of economic growth.[161] Similarly, system dynamics had been used by the Club of Rome to disseminate their anti-growth message, yet the CPB ultimately ended up using the tool for the further propagation of economic growth.[162]

---

160 This model was eventually published in: Centraal Planbureau, *Economische Gevolgen van Voorgenomen Milieubeleid, Een Tijdpadanalyse*, CPB Monografieën 23 (The Hague: Centraal Planbureau, 1982).

161 This process started with what the sociologist Elizabeth Popp Berman calls economisation. The assessment of all policy objects can be done in terms of what that policy would add to "the economy." Elizabeth Popp Berman, "Not Just Neoliberalism: Economization in US Science and Technology Policy," *Science, Technology, & Human Values* 39, no. 3 (2014): 397–431.

162 For a larger history of this development in the context of the OECD, see:

Outside of modelling, the image of society contained in system dynamics had also further added to a trend developing simultaneously in Dutch politics and policymaking. The integrative model had sought to translate democratisation demands. As argued throughout this chapter, in the second half of the 1960s, democracy no longer resided in the choices of individuals who could shape their own milieu, but in the participation of new social organisations in advisory councils.[163] Consequently, the old corporatist organisations such as the unions and business representatives had to share the stage of the deliberative councils with organisations that grew out of the new social movements, such as the environmental action committee (*Milieudefensie*, literally translated as "environmental defence"), and the social workers councils. The Social Economic Council (SER) was no longer the sole organisation that housed these social organisations. The Ministry of Education and Science and the spatial planning bureau gained official advisory councils of which industry representatives, labour unions, and environmental organisations were part.[164] Social housing, schools, and universities were encouraged to set up similar advisory councils, all with the intent to stimulate a new network of participatory democracy.[165]

System dynamics imagined this network of participation as a system of feedback loops. The task of the scientific expert was to translate the experiences, wishes, and visions of these social organisations into information currents that could be run through the system. It was vital for such a task that the ideas of these social organisations were framed and represented in a manner that enabled the social organisations concerned to add their own voices to the more bureaucratic knowledge that was produced in the process and recognise their contribution to that knowledge. The concept of feedback and the gradual improvement of information currents were instrumental to the success of such participation. Consensus was fostered by the synthesis of many opinions into one information current, recognisable to all the parties involved. The pitfall of this approach was that the system could not account for ideological opposition and fundamental disagreement. Similarly, real

---

Schmelzer, *The Hegemony of Growth*, chap. 8.

163  Rob Hoppe and Willem Halffman, "Wetenschappelijke beileidsadvisering in Nederland: Trends en ontwikkelingen," *Beleidswetenschap* 1 (2004): 35–38.

164  Den Hoed, "Een Keur van Raadgevers," 106–14; De Haan and Duyvendak, *In het hart van de verzorgingsstaat: Het ministerie van Maatschappelijk Werk en zijn opvolgers (CRM, WVC, VWS, 1952-2002*, 131–51.

165  Ido de Haan, *Zelfbestuur en staatsbeheer: Het politieke debat over burgerschap en rechtsstaat in de twintigste eeuw* (Amsterdam: Amsterdam University Press, 1993), 105–10.

power for social organisations was not addressed, as it was not their task to make any real policies.

The latter aspect brought with it another danger. The cybernetics of system dynamics suggested that political decisions were made on all levels of society and the state. However, the final decisions on how to act upon all the different information currents remained with the government and the prime minister as the ultimate "primus inter pares," as the De Wolff-committe put it.[166] However, with a complex system of information currents, it was easy to lose track of this ultimate decision. Van Tienen had already warned in 1966 that the "coordination [of multiple policy issues …] calls for strong decisions for those who are ultimately responsible; explaining developments out of complex coordination issues are often used as distractions."[167] As such, "a central vision on human well-being should not obscure the very real labour relations."[168] In other words, it was easy for the government to hide the ultimate decision in the jumble of the cybernetic system, pretending that they were simply enacting the decisions of social organisations on a lower level. As I will show in subsequent chapters, these problems would haunt social planning in the 1970s and ultimately lead to the immense shortcomings of Dutch deliberative politics that persist to the present day.


## *Conclusion*

Duyvendak has argued that the planning of emancipation was a strange combination of bottom-up and top-down politics that was only possible as a continuation of individual-focussed research programmes on the personal normative order that many social scientists were pursuing in the 1950s. That the coalition between state planners and social movement would soon go sour was inevitable, given the inherent tension between the two forms of politics in which both parties were engaged.[169] However, this interpretation ignores the new conception of historicity that arose in the second half of the 1960s. Long-term planning brought immense future issues to the political agenda that opened up the horizon of expectation in a radical new way. Both planners and social movements were struggling with this new future. Social

---

166  Den Hoed, "Een Keur van Raadgevers," 112.
167  Van Tienen, *Anatomie van Het Welzijn*, 21.
168  Van Tienen, 21.
169  Duyvendak, *De Planning van Ontplooiing*, 96–100.

movements had to act on their own individual visions of a future society, whilst planners sought ways to combine dispersed visions into one politics for the future.

I have attempted to nuance the claim that, with the radically open future, the modernist conception of historicity, as it had existed for more than 150 years up to that point, disappeared or was discredited—a claim that was, amongst others, made by Andersson. Precisely by seeking planning tools that could combine and synthesise multiple visions of the future, planners and politicians could still adhere to a modernist notion of progress. Although a lot of future-oriented politics remained unchanged, this new mode of modern historicity did fundamentally alter the decisionist imaginary. The state could allow for many different visions of the future in politics, and democracy could consist of the mode that these visions could influence the state apparatus in the formulation of a synthesised vision. To speak with Koselleck, the state was not only that which allowed political action to move towards the future, but also became itself a movement of the future. Using cybernetic images, scientific experts were understood to play a mediating role between different visions of the future, producing a singular future policy programme in which all social organisations could recognise themselves.

Ultimately, however, the main consequence of the space that was opened up between past and future was the thematisation of "the future" as the object of politics. All political actions had to be conceived in terms of their impact on the long-term development of society and its values. Even if, in the discourse on modernity (as discussed in the previous two chapters), politics had always been fundamentally future-oriented, none of these discourses placed the future itself, as an object of political discussion, into the political arena. It was a shift that radically altered the nature of politics and that, for all the talk of the waning of the future in contemporary discourse, never went away.

# Toekomst-denken



Figure I. 'Future Thinking', Jan Willem van Vugt in Binnenlands Bestuur, December 1980

# Intermezzo:
## The Ship of Fools

### I. Ekphrasis

Plato's metaphor of the Ship of Fools in *The State* describes the danger of the young untrained masses taking over the state from a single older leader. The steersman might be "somewhat deaf and rather short-sighted, with a knowledge of sailing to match his eyesight", still he is "larger and stronger than everyone in the ship" and is the only one with some knowledge and skill as to how to steer the ship. The younger sailors meanwhile all want to be captain, but lack the skill, even claiming that skill and training are not required to steer a ship. Once they have taken over the ship, they start "drinking and feasting, they sail in the way you'd expect people like that to sail."[1] It is Plato's classic argument that the state can only be led by those with the appropriate character and training fit for office. The demos of young sailors have a large mouth, but under their guidance, the state would be adrift on the open sea. It would be a ship of fools, an image portrayed since the renaissance many times in the history of Western art. Jan Willem van Vugt placed himself in that tradition when he made the political cartoon (above) for the periodical *Binnenlands Bestuur* (*Domestic Governance*) in 1980.

---

1 Plato, *The Republic*, ed. Giovanni Ferrari, trans. Thomas Griffith (Cambridge, UK: Cambridge University Press, 2012) Book VI (488a–488b).

In contrast to Plato's metaphor, Van Vugt's ship of state is not adrift. Rather, it is stuck on dry land. Also, it is not steered by politicians or administrators. Instead, the stern is dominated by heavy industry—a sign that the Dutch state is actually controlled by industrialists, whilst the administrators (*bestuurders*) are on the middle and front deck. Their faces are old, kind, even childlike and they appear to mean no harm. However, they have surrounded themselves with military equipment, holding a missile like it is a toy, the gasmask as a dress-up mask. These are war-minded people, who in their childishness cannot see the danger of the equipment they cherish. It is a clear commentary on the arms race and the willingness of the Dutch government to place cruise missiles on Dutch soil following the NATO Double-Track Decision in 1979.[2] The naivety of the Dutch administrators most likely stems from their techno-optimism. The fool's hats they wear, are adorned with the rotary handles of a valve. One wears a cage of Mensis, whilst the weathervane on top shows that he goes with the wind that is blowing from the industries: "Technological advancement is necessary for the Dutch industries, it is what keeps the ship of state going," he seems to think. In reality, however, this technological advancement produces only unemployed workers. The unions are protesting, facing the administrators on the cramped middle deck. The unemployed, however, are simply jettisoned overboard at the rear end.

Clean sustainable energy is the new sail that holds the promise of moving the ship again. However, the sail is not properly tied and flaps adrift in the dark clouds created by the factories. Yet it is not industry that moves the ship of state forwards either. Instead, the ship is dragged forwards on dry land by an army of workers. The sea has dried up and the state cannot produce any water to sail on. Austerity measures have turned off the water tap that came from the bowsprit, closing off any hope of a new ocean. The lion, the figurehead of state, national symbol, and part of the royal coat of arms, does not want to look to where the ship is going; in fear, he covers his private parts, his tail between his legs. The Netherlands seems deeply afraid of where the future is taking it. Only the elderly statesman in the porthole seems to face the future with confidence, but he has his eyes closed. Those tasked with looking towards the future, to tell the Dutch people where they are heading, also do not look ahead. In fact, they are not even on the ship. In the foreground we find them, the futurologists, deeply concerned with their

---

2 Duco Hellema, *Nederland en de jaren zeventig* (Amsterdam: Boom uitgevers, 2012), 279–81.

own business, not looking behind to see what is happening to the ship.

The technocrat is busy putting people into compartments. His motives are written on his hat: consumption and ethics. The sociocrat,[3] whose cybernetic thinking about the dynamics of administrators and social groups are to form an alternative to technocracy, has more heart and is more concerned with environmental wellbeing. A small plant even sprouts from his head. Yet his activity is the same as that of the technocrat: placing citizens into boxes. The futurologists meanwhile are gathered around micro-electronics and information technology, a weird chicken squeaks "chip, chip"—a reference to computer chips—whilst she eats small people. They are obsessed with the monstrous baby they have created with the micro-electronics, mistakenly thinking that this cyborg is the future. Only one person notices where the ship of state is actually heading. It is an administrator on the front deck holding a telescope. He spots a black hole in the sky named "decision-making."

Van Vugt's drawing style was influenced by Hieronymus Bosch, the famous painter from the Early Netherlandish school.[4] Bosch himself had painted a famous rendition of the ship of fools, and his painting likely inspired Van Vugt's cartoon in 1980. In turn, the art historian Joseph Leo Koerner has linked Bosch's painting style to what Martin Heidegger has described as "the age of the world picture." Heidegger had argued that underlying the historicism of the Ranke-Droysen school was the idea that a whole historical period could be put into one picture for the historian to oversee. He linked this development to the tendency in modern physics to create one unifying image of the cosmos.[5] Koerner traces this development back to the Early Netherlandish school, specifically, in the way Bosch contrasted the profound and hellish worlds full of chaos and everyday details to the serene pictures

---

3 Inspired by the ideals of Kees Boeke, Sociocracy was conceived by Gerard Endenburg as a form of governance that would circumvent the problems associated with technocracy. See: Gerard Endenburg, *Sociocratie: een redelijk ideaal* (Zaandijk: Woudt, 1975). This is not to be confused with the late 19th-century use of the notion 'sociocracy', as introduced by Lester Frank Ward, see: Alvin F. Nelson, "Lester Ward's Conception of the Nature of Science," *Journal of the History of Ideas* 33, no. 4 (1972): 633–38, https://doi.org/10.2307/2708862.
4 Anton Oskamp, "Interview met de tekenaar," in *De lekkerste tekeningen van Jan Willem van Vugt*, by Jan Willem Van Vugt (Amsterdam: Jeugdwerk Nu, 1975).
5 Martin Heidegger, "The Age of the World Picture," in *The Question Concerning Technology, and Other Essays*, trans. William Lovitt (New York: Garland Publishing, Inc., 1977), 115–54.

of the heavenly spheres.[6] History in Bosch's conception was chaotic, but also made by the daily business of demons and ordinary folk that dominated his paintings. Governing this chaotic profane history was still the heavenly serene history of God. Yet, by making imagines of these profane and heavenly spheres, Bosch also put the spectator in the position of God, capable of overseeing the chaotic nature of profane history. When Bosch's follower, Pieter Breugel, secularised Bosch's painting style, not painting biblical and moral allegories, but everyday life in the same chaotic fashion, he anticipated the step that historians would take, albeit two centuries later. Bosch and Breugel's conception of history was still static, but a conception in which history was made by the common people, and most importantly one that a single painter, spectator, or historian could oversee. By invoking Bosch's painting style, Van Vugt unintentionally commented, not only on his own experience of time, but also on the conception of historicity. His image of history is dominated by a future one cannot see. He therefore robs the spectator of what Bosch had provided: a god-like overview of history. For him, history is made out of the jumble of individual actors working with and against each other. However, this history seems to be either stuck or moving towards a pitch-black future in which no images at all are possible.

## II. Interpretation

By the end of the 1970s, the initial enthusiasm for social planning and futurology had become a doom mentality. The mid-1970s had seen a steep rise in unemployment—an issue that had been considered solved in the accelerating economic growth of the 1960s and not foreseen by any futurologists. Under the old economic growth policies, Dutch industry was still going strong, although not without some very generous government subsidies that had proven no solution to the unemployment problem.

As the social planning ideal had promised, administrators were driven out of the quarterdeck and now shared the middle deck with the unions. There was, however, a strong suspicion that they were still controlled by big business. Their kind faces were a sham that merely maintained the illusion

---

6 Joseph Leo Koerner, "Hieronymus Bosch's World Picture," in *Picturing Science, Producing Art*, ed. Caroline A. Jones and Peter Galison (London: Routledge, 1998), 297–323.

of democracy. Democracy was also undermined by the democratic ideals of the 1960s. With everyone in control, the spectre of the dark interest group arose. Whether industrialists, social workers, or the unions, a shadowy organisation seemed to be in control and democratisation policies had allowed them to seize power. In the maze of democratic decision-making, this shady coup had gone unnoticed. Politicians were robbed of the power of making difficult decisions, held hostage, the decision-making process turned into a black hole.

Meanwhile, one future issue became very dominant: technology. The development of micro-electronics and the computer technology built upon it predicted the next phase in technological advancement: another acceleration. Industries saw new business opportunities and new, profitable sectors of industry. Critics, however, saw instruments in the hands of the ruling elite for the total control of society. Together with the renewed tensions between the United States and Soviet Union, the promise of a collectively steerable future seemed utterly lost.

It appeared that futurologists were either late to pick up on this rising pessimism, or started, against the currents of the time, harsh battles with those who grew suspicious of technology and democratisation. For them, technological advancement still held the promise of a better future. However, the state was not to play any role in it. They abandoned ship. Technology held the promise of an even more individual future, in which everyone, at a local level, was able to shape their environment, connected via large information networks. Although technology served a political goal, the future was depoliticised. There was no longer a need for a collectively decided upon future if everyone could shape the future through their own personal computer. To put it even more strongly: Was there even still a collective in politics, if not only one large diverse and dispersed multitude? At least there was no need for the state to make the multitude into a collective—that seemed certain. Futurologists moved from being government advisors to advisors of privately owned businesses, thus creating an industry of their own.[7]

This is the development that is so beautifully caught in Van Vugt's cartoon, and it is the development that I will describe in the next two chapters.

---

7  Rein de Wilde calls this futurologist industry the 'future industry', see: Rein de Wilde, *De voorspellers: Een kritiek op de toekomstindustry* (Amsterdam: Uitgeverij De Balie, 2000), 9–15; see also: Jenny Andersson, *The Future of the World, Futurology, Futurists, and the Struggle for the Post-Cold War Imagination* (Oxford: Oxford University Press, 2018), 211–12.

Van Vugt's cartoons, even in his Bosch-inspired style, showed that the predicament he was drawing was still a very future-oriented affair. Moreover, as attested by the title of his cartoon, it was future thinking that had led to the lamentable state of affairs. It was the thinking on an open future disclosed by the accelerating experience of time that had started near the end of the 1960s. One could not escape the future in politics, even if the future was pitch black.

**Figure 5.1** "A Rail Disaster" Cartoon by Rob Wout (Opland) for *De Volks-krant*, 23 September 1976.

The text says: "Short summery of the future image, born from the sombre brain of the Socialist Professor Dr Th. Stevers and sketched full-page in De Volkskrant of 22 September 1976".

# Crisis and Neoliberalism:
## Towards a Politics of Restraint, 1973–1980

*In 1980, crisis-thinking is again central: government and businesses are appealing once more to the industrialisation-formula of the 1950s which led to such great successes."*

—Herman de Liagre Böhl, Jan Nekkers, and Laurens Slot,
*Nederland Industraliseerd* (1980)[1]

*But would the economic crisis not be an essential moment rather than mere crisis-thinking?*

—Arie van der Zwan, *Wederopbouw en Mobilisatie-Politiek* (1981)[2]

*All these economists have one thing in common: there are either members of the Labour Party or sympathisers […]. Whether this is due to the party being the most fashionable party amongst economists or because the party is even more vague in its commitments than the Christian Democrats, I leave up to the reader.*

—Hans van den Doel, *Het Biefstuk Socialisme en de Economie*
(1978)[3]

## Introduction

A train plunging into the ocean, its tracks no longer able to support it (figure 5.1). This was the image conjured up by the political cartoonist Opland (real name Rob Wout) to illustrate the sombre vision of the Tilburg neoliberal

---

1 Herman de Liagre Böhl, Jan Nekkers, and Laurens Slot, eds., *Nederland industrialiseert! Politieke en Ideologiese strijd rondom het naoorlogse industralisatiebeleid 1945 - 1955* (Nijmegen: Socialistsiche uitgeverij Nijmegen, 1981), 11.

2 Arie van der Zwan, "Wederopbouw en mobilisatie-politiek," *Socialisme en Democratie* 38, no. 11 (November 1981): 520.

3 Hans van den Doel, *Het biefstuksocialisme en de economie*, 2nd ed. (Utrecht: Uitgeverij Het Spectrum, 1979), 38.

economist Theo Stevers. The train was the centre left-wing cabinet led by the social democrat Joop den Uyl; the disintegrating tracks, the economy, and the ocean represented a vast mass of chaos and coercion. The message was clear: The economy could no longer sustain the weight of the ambitious social policies of the cabinet. The result was that Dutch society would be plunged into chaos or the coercion of an authoritarian state. Opland mocked Stevers' dark vision: Whilst the locomotive was almost hitting the sea, Stevers still tried at the rear-end of the train to stop the movement, even to reverse it. If the gloomy future was so near, was not any attempt to avert it futile?

Other commentators similarly thought that Stevers' vision was an exaggeration, describing him as a lone "prophet of doom."[4] Still, the idea that the Dutch economy was at a crucial crossroads was widespread. In his speech for the 62nd *dies natalis* of the Erasmus University Rotterdam, the economist Professor Carel van der Weijden observed that a changing economic order was being enthusiastically discussed amongst left-wing politicians.[5] Labour union leader Wim Kok, in an interview for the Dutch National Broadcasting Services, had claimed:

> [T]he traditional instruments of social-economic policy to tackle the unemployment problems are insufficient to such an extent that one had to wonder whether this social order or this social system, is going to get us out of the economic depression in a way that is in the worker's interest.[6]

A similar sentiment was voiced by Den Uyl when he argued in front of the Christian confederation of industries that they had to understand that "socialism is [ultimately] at odds with a free production of goods and services."[7] Although in isolation the quotes sound more threatening than they really were, the sentiment that longed for a change in economic order was very real.

Both for neoliberals such as Stevers, and social democrats such as Kok and Den Uyl, the current state of the economic order could not continue any longer. For both parties, the mass unemployment of the mid-1970s was

---

4 Frits van Oosten, "Linkse en rechtse economen als politieke profeten," *Socialisme en Democratie* 34, no. 4 (1977): 161–70.
5 Carel van der Weijden, "Naar een andere economische orde?," *Economische en Statistische Berichten* 60, no. 3030 (March 12, 1975): 1168–75.
6 Wim Kok on the "NOS-Journaal" (Hilversum: Nationale Omroep Stichting, September 23, 1975).
7 Joop den Uyl, "Speech Given for the Meeting of the Christian Confederation of Industry (NCW)" (Nijmegen, October 1, 1974).

a sign that the economic growth policies of the post-war political and economic order had reached its limits. The social democrats hoped that this old order could be replaced with something more just—more socialist. Neoliberals wanted to keep the free enterprise and trade of the old order, but disconnect it from its social policies. Both sentiments express the predominant experience in the 1970s, which I will characterise as an *experience of crisis*. Here, "crisis" is not meant in its present-day connotation as a period of distress, but rather, in its older meaning as a moment of a critical condition, in which a decision could permanently change the political tides.[8] The political-economic order was in crisis, and both the Left and the Right had the feeling that they had to act now to save or change it. As I will argue in this chapter, still underlying this experience of crisis was the sense of accelerating time and a radically open future (as discussed in the previous chapter). For Left and Right alike, it was clear that time was not going to decelerate. Its effects could either be channelled towards neoliberal wishes, or promoted in a manner more desirable to socialists.

This experience of crisis had everything to do with the growing distress of the *decisionist imaginary* of social planning from the 1960s. Both left- and right-wing intellectuals thought that the Dutch democratisation efforts the government had started in 1970 had led to an obfuscation of the policymaking process. In the jumble of decision-making parties, those really in power were hidden from view. Left-wing intellectuals thought that this had created the circumstances in which industrialist had seized power, whilst right-wing intellectuals feared that the state had been taken over by labour unions assisted by dark interest groups arising out of the social movements of the 1960s.

In the crisis and distress of the political and economic system, one group of thinkers quickly came to the fore, making its mark on Dutch political discourse as never before: the neoliberals. The term 'neoliberalism' in the context of Dutch political discourse is a complex issue. The main neoliberal protagonists of this chapter, Stevers, Willem Drees Jr., Hans Daudt, and Arnold Heertje, are not remembered as neoliberals, even if their arguments show structural similarities to those of neoliberal figureheads such as Friedrich

---

8  For this older interpretation of the term "crisis," see: Rüdiger Graf, "Either, Or: The Narrative of 'Crisis' in Weimar Germany and in Historiography," *Central European History* 43, no. 4 (December 2010): 592–615, https://doi.org/10.1017/S0008938910000725.

Hayek, Milton Friedman, and James Buchanan.[9] Their opponents, amongst them Den Uyl, certainly had no problem with calling them neoliberal at the time.[10] However, the neoliberal label then disappears from political discussions, only becoming associated much later with wider reform and politicians such as Ronald Reagan and Margaret Thatcher in the late 1980s and 1990s.[11] Consequently, the earlier homegrown tradition of neoliberalism is somewhat lost in the current political consciousness.[12] Yet, as I will show in the first section of this chapter, neoliberalism did not simply appear "from nowhere" in the 1970s, having already gained steam long before the reforms in the second half of the 1980s.

Already from its earliest inception, neoliberalism had been intimately linked with the experience of crisis. Friedrich Hayek in *The Road to Serfdom* (1944) had already warned that liberal democracies were in danger of sliding into authoritarian states through their war-led economies and social policies. In the Netherlands, this narrative was promoted after the war by a group of early neoliberals, who warned that Dutch social policy reforms would soon undermine not only free enterprise, but also free civil society. However, none of these dire warnings came to fruition in the first decades after the war and neoliberalism was soon driven into obscurity—although,

––––––––––

9 Spotting the neoliberal character of the works of my main neoliberal protagonists, my analysis is greatly supported by international histories of neoliberalism, especially those who discern a "neoliberal thought collective." See: Philip Mirowski and Dieter Plehwe, eds., *The Road from Mont Pelerin: The Making of the Neoliberal Thought Collective* (Cambridge, MA: Harvard University Press, 2009); Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978–1979* (London: Picador, 2010); Angus Burgin, *The Great Persuasion: Reinventing Free Markets since the Depression* (Cambridge, MA: Harvard University Press, 2015); Quinn Slobodian, *Globalists: The End of Empire and the Birth of Neoliberalism* (Cambridge, MA: Harvard University Press, 2018).

10 See, for example: A.J. Cuppen, "Nogmaal: Hoezeer Bedreigd Moderne Staat Democratie," *NRC Handelsblad*, January 28, 1978; A. F. van Zweeden, "De Moeilijke Start van 'Nederland B.V.,'" *NRC Handelsblad*, February 27, 1982.

11 In general, the Netherlands has a difficulty with acknowledging its own neoliberal tradition. For a discussion on this problem, see: Merijn Oudenampsen and Bram Mellink, "De zichtbare hand: een historisch-sociologische benadering van neoliberalisme in Nederland," *Sociologie* 15, no. 3 (2019): 241–51, https://doi.org/10.5117/soc2019.3.001.oude.

12 In recent years, historians of neoliberalism have emphasised the local networks of neoliberal thinkers and how their thoughts responded to national policy issues. Consequently, national currents of neoliberalism are discernible. For example, see: Ben Jackson, "Currents of Neo-Liberalism: British Political Ideologies and the New Right, c.1955–1979," *English Historical Review* cxxxi, no. 551 (August 2016): 823–50, https://doi.org/doi:10.1093/ehr/cew237.

as briefly discussed in the second chapter, it did influence the ministers of economic affairs from the Catholic People's Party (KVP).[13] Fast forward to the 1970s, when the political-economic system again seemed to be under threat of large-scale social reform, and neoliberalism starts gaining real momentum.

Yet the neoliberal solution to the crisis of the 1970s was different from the proposals of the 1950s—something that often goes unacknowledged in studies of neoliberalism.[14] What had shifted was the experience of time— something that had also altered neoliberalism itself. Contrary to what Opland's cartoon showed, neoliberals knew that they could not stop the acceleration of modernity. Instead, they sought the means to moderate the effects of the acceleration. Early neoliberals had already conceptualised the market as "the mediator of modernity"—an institute that could temper the social demands for welfare and channel them in a manner that would not threaten free enterprise or the sovereign state.[15] However, in the open future that manifested itself towards the end of the 1960s, a new kind of mediator emerged: technology. For neoliberals, novel micro-electronics in particular held the promise of a more individualised society in which social movements and interest groups could satisfy their preferences outside of the state. Consequently, micro-electronics became the subject of heated debate in the late 1970s.

In its inception in the Netherlands, neoliberalism was deliberately not tied to one political party.[16] Instead, early neoliberals sought influence in all of the major parties. This was partly a strategy through which neoliberalism attempted to conceal its presence. By fighting its battles within the existing parties, neoliberalism would remain diffuse and not provide an easily identifiable enemy for its detractors. It was also partly a reaction to counter the welfare reform willingness that dominated all major parties after the Second World War. John M. Keynes or Karl Mannheim both asserted that

13 See also: Bram Mellink, "Politici zonder partij: Sociale zekerheid en de geboorte van het neoliberalisme in Nederland (1945-1958)," *BMGN - Low Countries Historical Review* 132, no. 4 (2017): 47, https://doi.org/10.18352/bmgn-lchr.10220.

14 Cf. Merijn Oudenampsen and Bram Mellink, "Bureaucrats First: The Leading Role of Policymakers in the Dutch Economic Paradigm-Shift of the 1980s," *TSEG, Low Countries Journal of Social and Economic History* 18, no. 1 (2021).

15 Ola Innset, *Reinventing Liberalism: The Politics, Philosophy and Economics of Early Neoliberalism (1920-1947)* (Cham: Springer, 2020), 32–49.

16 Mellink, "Politici zonder partij," 31.

a battle of ideas had to be fought within the party elites.[17] Consequently, even the Labour Party (*PvdA*)—seemingly the ideological enemy of neoliberalism—had, from the 1950s onwards, committed neoliberals within their ranks. Clashes within the Labour Party, between the Left wing, inspired by the ideas of the New Left, and the Right wing, inspired by neoliberal ideas, were particularly fierce. This makes the Labour Party in the 1970s a particularly fruitful object of study via which to map out the socialist and neoliberal arguments on the experience of crisis, the changing economic order, and the role of technology. Therefore, I will again mainly focus on sources from the Labour Party.

This chapter discusses how planning, under the influence of neoliberal theories, changed. In particular, I want to argue that planning became a means to restrain the state, whilst technology was reconceptualised as a channel for emancipatory demands. To establish the relationship between the political history of neoliberalism and theories of planning, this chapter will also examine two new economic modelling techniques that became prominent in the wake of the loud neoliberal warnings: *public choice theory* and *neo-classical growth modelling*. In the UK-oriented literature, it is argued that public choice became popular as an alternative narrative about why the Keynesian policies of the old economic order had failed.[18] In this narrative, public administrators were not to be trusted since they always acted in accordance with their own personal preferences. The bureaucrats' interests had caused the public sector to grow extensively and now threatened to swallow the private sector. The solution was to shield the state from majority interest by delegating crucial state tasks to minority organisations.[19] For the Dutch context, I will argue, the story is a little different. The main driver behind the success of public choice in the Netherlands was its seeming potential to untangle the decision-making mess that the new forms of democratisation had

---

17 John Maynard Keynes, *The General Theory of Employment, Interest, and Money*, ed. Elizabeth Johnson and Donald Moggridge, vol. 7, The Collected Writings of John Maynard Keynes (London: Royal Economic Society, 1978), 383; Karl Mannheim, *Ideology and Utopia: An Introduction to the Sociology of Knowledge* (New York: Harcourt, Brace and Company, 1936), 176–77.

18 Colin Hay, *Why We Hate Politics* (Cambridge, UK: Polity, 2007), 106–7. See also: Noel Thompson, "Hollowing Out the State: Public Choice Theory and the Critique of Keynesian Social Democracy," *Contemporary British History* 22, no. 3 (2008): 355–82, https://doi.org/10.1080/13619460701731913.

19 Hay, *Why We Hate Politics*, 110–13. Cf. Peter Mair, *Ruling the Void: The Hollowing of Western Democracy* (New York: Verso, 2013), 4–6.

caused. It appeared to promise a cleaner form of decision making—one that was more individualistic and beyond the shadowy powers of interest groups. Remarkably, this theory was popular with both the New Left as well with the proponents of neoliberalism.

The influence of public choice on planning was not direct and the CPB had not yet developed any public choice-inspired models. However, its indirect influence is all the more salient since public choice discredited the previous social planning ideal and forced the CPB to pursue a different path. In order to understand this influence, this chapter will depart from the focus on the CPB in the previous chapters, looking instead to broader discussions on the economy and democratisation in sections two and three.

The second major modelling technique, neoclassical growth modelling, of the type developed by Robert Solow (see section 4.1), proved to be the ultimate tool via which minority offices were able to protect the state from the influences of social movements and interest groups. By setting long-term goals with growth models and forcing politicians and bureaucrats to adhere to those goals, the state could be protected from ad-hoc decisions influenced by social organisations. These models were developed within the CPB and, in cooperation with neoliberal policymakers, implemented towards the end of the 1970s. To understand the popularity of neoclassical growth modelling, it is again necessary to look beyond the vestiges of the CPB and take the discussions on technology at the time into account. As I explain in the fourth and fifth sections, the policy debate on technology took shape in different government advisory councils, namely, the Scientific Council for Government Policy (WRR), and the Rathenau Committee.

In the first three sections of this chapter, I describe the rising popularity of public choice against the backdrop of a political-economic order in crisis. The first section describes how the issue of public choice gather pace in policymaking circles and the economics profession. How public choice resonated with the economic problems of the 1970s, provides the focus for the second section, which also contains an analysis of the issues concerned in the fear of the breakdown of the political-economic order. Subsequently, section three will do the same for the discussions on democratisation. As I will argue, these issues should be viewed as a reaction to the social planning discourse of the 1960s.[20] The fourth and fifth sections describe the debate on technology

20 The first four sections of this chapter have appeared in an altered version in: Thomas Kayzel, "Towards a Politics of Restraint: Public Choice Theory in the La-

of the period—in particular the findings of the Rathenau Committee, which was tasked with investigating the social impact of micro-electronics by the Dutch government. The fifth section also examines the neoliberal response to these debates. The influence of neoclassical growth modelling provides the central focus of the remaining two sections.

## 5.1 Budget Norms and the VINTAF Model

As mentioned in the previous chapter, the New Left and other new social movements had pushed the Labour Party towards the Left at the end of the 1960s and early 1970s. Turning against the consensus politics of the previous decade, a Labour Party report from 1967 stated: "[W]e are living in times that are characterised a high level of artificial consensus" and "the social welfare state as developed in many industrialised countries left wide gaps in income, wealth and privilege—and therefore discrimination—intact."[21] Following the elections of 1971, the Labour Party, together with two new left-wing parties, Democrats '66 (D66) and the Party of Political Radicals (PPR, a splinter party of the KVP), formed a shadow cabinet, then a new phenomenon in Dutch politics.[22] In the election of 1973, whilst these parties grew their share of parliamentary seats,  the gains were too little to form a new government. Together with D66 and PPR, Labour leader Joop den Uyl decided to form a cabinet with the two major Christian parties, KVP and the Anti-Revolutionary Party (ARP). Although a coalition between left-wing and centrist parties, the Den Uyl cabinet was the most left-wing cabinet in the history of Dutch parliamentary history. The resulting coalition agreement had the slogan "the distribution of knowledge, power and income", presenting an agenda for higher taxes for higher incomes, an extension of social services, and large-scale public investments in housing, education, and recreation.[23]

---

bour Party of the 1970s," *TSEG - The Low Countries Journal of Social and Economic History* 18, no. 1 (2021).

21  Joop den Uyl et al., *Een Stem die telt: Vernieuwing van de parlementaire democratie* (Amsterdam: Arbeiderspers, 1967), 42–43.

22  Philip van Praag, *Strategie en illusie: Elf jaar intern debat in de PvdA, 1966-1977* (Amsterdam: Het Spinhuis, 1990).

23  Duco Hellema, *Nederland en de jaren zeventig* (Amsterdam: Boom uitgevers, 2012), 150–52.

However, this ambitious agenda was frustrated when, in October 1973, the Netherlands was boycotted by the Organization of Arab Petroleum Exporting Countries for their support of Israel in the Yom Kippur War. This resulted in what became known as the oil crisis, after which a spike in inflation and unemployment—a combination often described by the overarching phenomenon of *stagflation*—only served to deepen the problems.[24] The Keynesian framework that formed the groundwork of the cabinet's proposals was profoundly questioned, both from within the cabinet and from outside, in the national media. The direction of the cabinet changed in 1975, when Minister of Finance Wim Duisenberg acting upon alarming reports from the CPB and his department introduced new budget rules to restrict government expenditure.[25]

Although Duisenberg's decision in 1975 seemed to be a consequence of the oil crisis and stagflation, the introduction of the new budgetary rules was actually much longer in its making. Indeed, budget rules were nothing new in Dutch policymaking circles and discussions on such rules stemmed from the 1950s, driven, in particular, by neoliberal economists and policymakers. In order to understand the mounting pressure to re-introduction budgetary rules in the mid-1970s, it is informative to trace this longer history. One of the earliest pleas for budgeting rules can be found in Willem Drees Jr.'s 1955 dissertation, entitled: *On the Level of Government Expenditure in the Netherlands After the War*. As already touched upon in the third chapter, Drees was trained within the CPB and adopted many of the Cold War rationality tools that were studied within the bureau in that time. Like Henri Theil, he used rational choice theory to model the behaviour of political actors to predict the formation of policy over the long term. However, in a departure from Theil, Drees explained the behaviour of policymakers, not in terms of the anticipation of the actions of others, but in terms of their own preferences—those derived from the departments in which the policymakers were working. In other words, policymakers always strived for the highest effectiveness of *their* policy measures by securing funds and personnel. Consequently, they did not act in accordance with the common good or the interests of the

---

24 For an international overview of this phenomenon and its political implications, see: Charles S. Maier, "The Politics of Inflation in the Twentieth Century," in *In Search of Stability: Explorations in Historical Political Economy* (Cambridge: Cambridge University Press, 1987), 187–224.

25 Wessel Visser and Rien Wijnhoven, *Baan Brekende Politiek: De achterkant van de massale werkloosheid* (Kampen: Kok Agora, 1989), 42–54.

state or government.[26] Drees' method can be called an early form of public choice theory, similar in principle to Anthony Downs' *An Economic Theory of Democracy* (1957), William H. Riker's *The Theory of Political Coalitions* (1962), and James Buchanan and Gordon Tullock's *The Calculus of Consent* (1962).[27]

With his model, Drees sought to explain the drafting process behind the government's budget in which the ministers representing the public sector—health care, education, recreation, social services—formed a united front that forced the minister of finance, who stood alone, to expand the government budget, even if more expenditure was not beneficial to the economy. In this manner, Drees explained how and why the government budget had quickly grown, even under right-wing cabinets, following the Second World War.[28] He found this alarming for two reasons. First, this dynamic meant that the government's budgets always increased. Inspired by a popular critique amongst Social and Christian Democrats, Drees believed that societal demand for public services could be artificially induced, transforming citizens into spoiled consumers, their ever-increasing demands acting to the detriment of their inner spiritual lives. This form of critique stemmed from the same post-war obsession with the alienated individual that Banning's personalism and the Utrecht School's psychology also professed.[29] This meant that social services and social demands placed upon them were locked into a vicious spiral: Greater demand created a larger public sector and a larger public sector created greater demand. The second reason was that Drees worried that the growth of the public sector would hamper the relative growth of the private sector, causing a poor investment climate.[30] Drees' argument was similar to that of more pessimistic economists, such as Professor Pieter Hennipman of the University of Amsterdam, who feared that growing gov-

---

26 Willem Drees Jr., *On the Level of Government Expenditure in the Netherlands after the War*, Aspecten Der Economische Politiek, III (Leiden: Stenfert Kroese, 1955), 62–67.

27 Merijn Oudenampsen and Bram Mellink, "The Roots of Dutch Frugality: The Role of Public Choice Theory in Dutch Budgetary Policy," *Journal of European Public Policy* First view (2021), https://doi.org/10.1080/13501763.2021.1936130.

28 Willem Drees Jr., "Pre-advies van Dr. W. Drees Jr," in *Inflatiebestrijding: Wenselijkheid en Mogelijkheid*, Preadviezen van de Vereniging voor de Staathuishoudkunde (The Hague: Martinus Nijhoff, 1957), 1–38.

29 Merijn Oudenampsen and Mellink, *De markt als meester: Een geschiedenis van het neoliberalisme in Nederland.* (Amsterdam: Boom, Forthcoming), chap. 2.

30 Willem Drees Jr., *Inkomensverdeling en Overheidsuitgave*, inaugural address: University of Rotterdam (Haarlem: De Erven F. Bohn B.V., 1963).

ernment expenditure would inevitably lead to socialism.[31]

What made Drees' analysis so worrisome, was that it showed how the political ideas promoted by the cabinet and parliament had little to no effect on the growth of public expenditure. This dangerous development could therefore not be stopped by parliamentary politics. Instead, Drees and like-minded economists such as Cornelis Goedhart and Coen Oort argued for budgeting rules to be placed partly outside of the democratic decision-making process that could trim the growth of the public sector. Such ideas quickly became popular amongst policymakers in the Ministries of Finance and Economic Affairs. Demonstrating his profound commitment to solving the issues raised in his analysis, Drees became director-general of the national budget (*Directeur-Generaal Rijksbegroting*), a public office overseeing the budgeting process, in 1956. Later, in 1969, he became chief treasurer, further propagating idea of budgetary norms within policymaking circles.[32] Drees shared this conviction with other newly appointed public officials, such as Frans Rutten and Lenze Koopmans.[33] Their wish for public finance rules became a reality in 1961 when Jelle Zijlstra, who became minister of finance in 1958, introduced a budgeting norm that made public spending dependent on the projected tax incomes for the coming years, thus restricting the influence of the parliament and cabinet over the government's budget.[34]

Although ideas on budgetary norms had gained a strong foothold in policymaking circles and were further disseminated in the subdiscipline of public finance—a very popular topic in Dutch universities—they could not turn the tide of public spending. With continuing economic growth, the end of wage moderation, and the further expansion of the social security system, restricting budgets was not attractive to most ministers. Even Zijlstra's input did little to change the situation. In 1966, the cabinet of Prime Minister Jo Calls fell dramatically over a conflict with members of parliament from the KVP concerning the national budget.[35] Yet even this event did little to reverse

31 Pieter Hennipman, *De theoretische economie en de wederopbouw*, inaugural address; University of Amsterdam (Amsterdam: Noord-Hollandsche Uitgevers Maatschappij, 1945).

32 Oudenampsen and Mellink, "The Roots of Dutch Frugality," 5–6.

33 See, for example: Frans Rutten, "Over het macro-economische beleid voor de middellange termijn," *De Economist* 116, no. 3 (1968): 287–308.

34 See: Jelle Zijlstra, "Het belang van vaste beleidsbakens," in *Het Sociaal-Economisch Beleid in de Tweede Helft van de Twintigste Eeuw. Opstellen aangeboden aan Prof. d. F.W. Rutten* (Groningen: Wolters-Noordhoff, 1990).

35 Harry Notenboom, *De val van het kabinet-Cals: De financiële politiek van de*

the overall political attitude that higher budgets were not really a problem. The problem with all of these attempts to introduce budgetary control was that it did not concur with the models of the CPB, which played such a significant role in the general consensus and corporatist politics of the 1960s. The positive aspects of macroeconomic forecasts had hidden the gravity of the budgetary issues they concealed.[36] Moreover, apart from a small number of "fiscal hawks" in the KVP, issues of public finance remained a largely technical affair and failed to gain traction in the national media.

By 1970, small issues in the Dutch economy had started to crop up. Inflation was rising at an foreseen rate, and both the Social and Economic Council (SER) and the CPB had growing concerns that the government's investment agenda was overheating the economy. The employer organisations of the SER spurred the government to develop sector-specific policies to stimulate those that needed more development whilst tempering others.[37] Meanwhile, the CPB had the feeling that the modelling of the supply side of the economy was lagging behind their work on the demand side.[38] The Central Economic Committee (CEC), an interdepartmental consultation between high-ranking policymakers from the Ministries of Finance, Economic Affairs, and Social Affairs, began to encourage the CPB to seek the origins of the high inflation on the yet to model supply side. In the CEC meetings, Rutten, echoing Drees' work in 1955, argued that public finance probably played a significant role in raising inflation.[39]

The CPB complied, further developing the neoclassical growth models to tackle these issues. Combining Solow's theory on technical change (see

*Katholieke Volkspartij in de parlementaire periode 1963-1967* (The Hague: Sdu Uitgeverij, 1991).

36 Frans Rutten, "De betekenis van macro-econornetrische modellen bij de beleidsvoorbereiding," in *Toegepaste Economie: Grenzen en Mogelijkheden. Opstellen aangeboden aan C.A. van den Beld bij zijn afscheid als directeur van het Centraal Planbureau*, ed. Hans Den Hartog and Johannes Weitenberg (The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1984), 78–101.

37 SER Sociaal-Economische Raad, *Rapport Inzake de Sectorstructuurpolitiek*, vol. 21 (The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1969), 3.

38 'Beoordeling van de Huidige Economische Ontwikkeling' memorandum prepared for the Centraal Economische Commissie, April 10, 1970, Nationaal Archief, Den Haag, Ministerie van Economische Zaken: Centraal Planbureau, nummertoegang 2.06.093, inventarisnummer, 211. (hereafter abbreviated as: NL-HaNA, CPB, 2.06.093).

39 'Nadere en herziene informatie met betrekking tot de economische vooruitzichten van 1973', memorandum prepared for the Centraal Economische Commissie, June 7, 1972, NL-HaNA, CPB, 2.06.093, inv.nr. 211.

previous chapter) with multi-sector growth modelling, a technique developed by the students of Ragnar Frisch in Norway, the CPB was able to present a model of the economy in which each sector had a specific production function, the variables of which (capital and labour) could be further disaggregated.[40] What allowed for this advancement in modelling was the data on capital goods the CPB could utilise in the fitting of their production curves. This data was gathered via business surveys—after initial animosity, industries were now much more willing to supply data due to the friendly connections the CPB had with the SER.[41]

For their new mid-term growth models, the CPB relied on a later theoretical innovation by Solow, the so-called vintage-method, which was able to analyse how and when technological innovation would occur in the production process. To put it in more technical terms, it analysed technical change within the production function by looking at the age and replacement rate of the available capital goods within a given industry.[42] The first successful study of this kind, developed by Hans den Hartog and Hok-Soei Tjan, was completed in 1974.[43] The results were as spectacular as they were speculative, so much so that the original paper was rejected by the periodical of the Dutch Economics Society—*The Economic and Statistical Bulletin* (*Economische en Statistische Berichten*, ESB).[44] The CPB ultimately decided to publish the results on their own, causing quite a stir in the Dutch economics

40 "Een ontwerp modelstructuur voor een rompmodel met 13 bedrijfstakken," research memorandum written by Carel Eijgenraam, May 24, 1977, NL-HaNA, CPB, 2.06.093, inv.nr. 361. For more on multi-sector growth modelling, see: Verena Halsmayer, "A Model to 'Make Decisions and Take Actions,'" *History of Political Economy* 49, no. Annual Suplement (2017).

41 'Uitvoerwaarde, -prijzen, en- hoeveelheden van goederen en diensten per bedrijfstak', research memorandum, B. Minne, 7 June 1973, 1972, NL-HaNA, CPB, 2.06.093, inv.nr. 362.

42 Robert M. Solow, "Substitution and Fixed Proportions in the Theory of Capital," *The Review of Economic Studies* 29, no. 3 (June 1962): 207, https://doi.org/10.2307/2295955; See also: Mauro Boianovsky and Kevin D. Hoover, "In the Kingdom of Solovia: The Rise of Growth Economics at Mit, 1956-70," *History of Political Economy* 46, no. suppl_1 (December 1, 2014): 210–11, https://doi.org/10.1215/00182702-2716172.

43 Hans den Hartog and Hok Soei Tjan, "Investeringen, lonen, prijzen en arbeidsplaatsen: een jaargangenmodel met vaste coëfficienten voor Nederland," *CPB occasional paper* 8 (1974): 13.

44 J. Passenier, *Van planning naar scanning: Een halve eeuw Planbureau in Nederland* (Groningen: Wolters-Noordhoff, 1994), 221.

profession in the process.[45]

By 1974, the oil crisis had hit Dutch economy and unemployment had soared. Hartog and Tjan attempted to explain the high unemployment rate in reference to the age of the capital goods within Dutch industry. Their thesis was that, due to the high cost of labour, the replacement rate of capital goods had been exceptionally high in the 1960s. Faced with high labour costs, the employers had chosen to invest in new machines to increase their production rather than hiring more employees. Consequently, the new technology had led to automation, resulting in a reduced number of jobs. Hartog and Tjan explained the high labour costs citing the rise of social taxes used collective insurance system to finance social services. In other words, expansions of the social services had caused the unemployment crisis. This thesis was tested against the large amount of data that the CPB had gathered on the availability of capital goods in the Dutch industry. However, little other empirical material was used to support the thesis.[46]

The political implications of the model were hammered home a year later at the yearly meeting of the Dutch Economics Society.[47] The Hartog-Tjan model had been expanded into a fully-fledged macroeconomic model, which made more elaborate provision to analyse demand. In line with the wishes of the CEC and Rutten in particular, the relation between the production function and public finances were also elaborated upon. The CPB argued that lowering the fiscal burden (which included all taxes levelled by the state) could counter the unemployment level. In this manner, the CPB made a connection between the government budget and the unemployment crisis.

The new macroeconomic model, called the VINTAF model (named after the '*vin*tages' of the capital goods and '*af*zet,' the Dutch word for sales),

---

45 See: E. Boekema, "Investeringen, werkgelegenheid, arbeidsinkomensquote en rendement," *Economische Statistische Berichten* 59, no. 2975 (October 30, 1974): 962–63; Frans Rutten, "Macro-economische opmerkingen over de werkgelegen," *Economische en Statistische Berichten* 60, no. 2983 (January 1, 1975): 4–5; F.J. Clavaux, "Enkele kwantitatieve aspecten van de Nederlandse werkloosheid," *Economische en Statistische Berichten* 60, no. 2984 (January 8, 1975): 31–34.

46 This critique was raised in: Wim Driehuis and Arie van der Zwan, "De Voorbereidingen van het economisch beleid kritisch bezien (Part I & II)," *Economische en Statistische Berichten* 62, no. 3119 & 3120 (August 31, 1977).

47 Hans den Hartog, Hok Soei Tjan, and Theo Van de Klundert, "Structurele Ontwikkeling van de Werkgelegenheid in Macro Economisch perspectief" (Paper for the Annual Meeting of the Dutch Society of Economics in The Hague, September 1975).

formed the basis for an alarming report the CPB sent to Minister Duisenberg in 1975, offering a very sombre prognosis of a continued rise in unemployment up to the year 1980, with no improvement in the situation in sight.[48] The cabinet decided to implement a new budgetary norm, the so-called 1% norm. The growth of the collective financial burden (taxes and premiums) was not to exceed more than one per cent of the national income. Together with restrictions on public debt, this basically came down to the implementation of austerity measures to contain the growth-rate of the public sector.

However, the VINTAF model and the 1% norm did not convince everyone of the urgency for these new measures. Den Uyl and the minister of economic affairs, Jaap Boersma, were highly sceptical and very hesitant to go along with the plans. Neoliberal policymakers, such as Rutten, were not convinced either. To them, the 1% norm still allowed the public sector to grow faster in relation to the private sector, albeit at a slower speed.[49] As a result, pressure on the 1% norm mounted and the operation proved to be a failure.[50] However, with the VINTAF model, the proponents of budgeting norms finally had a macroeconomic tool at their disposal that worked in accordance with the implementation of restrictions on the budget.

## 5.2 The Economists' Debate and the Economic Order

The VINTAF model had not failed to catch the attention of journalists. This was in no small part due to some clever PR by the CPB itself. It had placed the VINTAF model front and centre in the reporting of its advice to the government, stressing the innovative character of the model. Then director of the CPB, Cees van den Beld, did interviews with major newspapers to explain the sudden shift in its advisory reports.[51] Theo van de Klundert, one of the modellers of VINTAF, even wrote a small booklet aimed at a general audience

---

48  José Toirkens, *Schijn en Werkelijkheid van het Bezuinigingsbeleid 1975—1986* (Deventer: Kluwer, 1988), 40.

49  Dick Wolfson and B. Le Blanc, "Een linkse norm," *Socialisme en Democratie* 33, no. 2 (February 1976): 50–66.

50  Toirkens, *Schijn en Werkelijkheid*, 40–50.

51  For example: "Prof. dr.C.A. van den Beld van Centraal Planbureau: 'Geen winstherstel op korte termijn," *De Telegraaf*, November 4, 1977; "Bij Ongewijzigd Beleid Zijn Er Geen Lichtpunten CPB-Directeur: Loonmatiging Combineren Met Lastenverlichting," *Nederlands Dagblad*, November 4, 1977.

to explain the workings of the model.[52] It was therefore not surprising that when the rift in the cabinet caused by the introduction of the 1% norm was fought out in the headlines of the national newspapers, labour unions, industrial organisations, economists, and columnists all formulated their opions on the new CPB model.[53] What had been an internal discussion amongst economists with the Hartog-Tjan model was now a public discussion.

As a result, public figures in the Labour Party instigated a heated discussion on the pages of *Socialism and Democracy,* which either followed the line of the "the stern ideologue" (Den Uyl), or the "pragmatist" (Duisenberg).[54] The result was the so-called *economists' debate,* in which members of the Amsterdam School of economics, who were close advisors to Den Uyl, clashed with the neoliberal camp, led by Stevers and supported by economists such as Arnold Heertje, Dick Wolfson, and Victor Halberstadt.[55] Yet the full impact of the economists' debate is generally not well understood. Indeed, many later commentators treat them as mere precursors to subsequent discussions on the implementation of neoliberal policies of the 1980s.[56] As sources from the period show, these discussions were about much more than the unemployment crisis in relation to the fiscal burden and addressed the whole structure of the economic order. Untangling the different issues at play, it becomes clear that underlying the economic bickering were issues

---

52  Theo Van de Klundert, *Lonen en Werkgelegenheid*, Bedrijfskundige Signalementen (Leiden: H.E. Stenfert Kroese BV, 1977).

53  I made a more elaborate analysis of these reactions elsewhere. See: Tom Kayzel, "A Night Train in Broad Daylight: Changing Economic Expertise at the Dutch Central Planning Bureau 1945—1977," *Œconomia* 9, no. 2 (October 22, 2019): 360–64, https://doi.org/10.4000/oeconomia.5613.

54  Bart Tromp, "Een stap naar een praktische ideologie," *Socialisme en Democratie* 36, no. 1 (1979): 21–27.

55  For an overview of the debate by some of its participants, see: Van den Doel, *Het biefstuksocialisme*, chap. 4; Arnoud Weeda, "Van economendebat tot economiediscussie," *Socialisme en Democratie* 36, no. 1 (January 1979): 3–15; Peter Lansbergen, *Het Economiedebat: Economen contra Den Uyl en Van Agt*, Intermediair Bibliotheek (Amsterdam: intermediair, 1980).

56  See, for example: Visser and Wijnhoven, *aan Brekende Politiek*; F.A.G. den Butter, "Macroeconomic Modelling and the Policy of Restraint in the Netherlands," *Economic Modelling* 8, no. 1 (January 1991): 16–33, https://doi.org/10.1016/0264-9993(91)90019-K; Jan Luiten van Zanden, *The Economic History of The Netherlands 1914-1995: A Small Open Economy in the "Long" Twentieth Century*, Routledge Contemporary Economic History of Europe (London: Routledge, 1998), 170; Jan Luiten van Zanden, "De Spagaat van Het Centraal Planbureau," Mejudice, December 24, 2010, http://www.mejudice.nl/artikelen/detail/de-spagaat-van-het-centraal-planbureau.

that were primarily ethical in nature. Moreover, it is in these discussions that the experience of the crisis of the political and economic order becomes tangible.

In 1971, several years before "stagflation" hit the Dutch economy, Stevers had instigated the attack on Keynesian policies in his book *Public Finance and Economics*.[57] In the book, Stevers argued that, as a result of high social insurance costs, the disposable income of employees had in relative terms decreased. This not only hampered private consumption, but also led to a constant demand from labour unions for higher wages. These demands, in turn, led to high inflation, whilst declining investments and consumption caused the economy to stagnate.[58] Yet Stevers thought of these problems neither as accidental, nor as the effect of poor political choices. Rather, he thought such problems were an inherent part of Keynesianism. State intervention in the economy always had negative side effects that the government could not foresee. In the Keynesianism framework, these effects had to be remedied by further interventions, but this time in a less planned and more ad-hoc manner. Yet clearing up the mess of the previous policy would only give way to more negative side effects, thus setting in motion a negative spiral of still more interventions.[59]

Stevers' analysis shared the characteristics of the early neoliberal ideas that the problems of the economic system were structural and were unlikely to be solved by parliamentary politics. The problem was, according to Stevers, the corporatist-directed economy. In the centrally negotiated wage agreements (*centrale arbeidsovereenkomsten*) within the SER, wage increases were coupled to the inflation rate in the price indexes. Over the course of the 1960s, these price indexes started to contain more and more basic provisions. When introduced in 1945, they simply contained what was perceived as the basic needs of a family: food, clothing, coffee, and cigarettes. By 1970, they contained housing, health care, books, education, sport, and means of transportation (bicycles and cars).[60] A large proportion of these basic goods came from the public sector, the prices of which rose due to social taxation. However, more public services led to higher taxes, which in turn led to high-

---

57 Works by Lansbergen and Weeda (Op. cit. n. 55.) praise Stevers for his insight.
58 Theo Stevers, *Openbare Financiën En Ekonomie* (Leiden: H.E. Stenfert Kroese, 1971), 266–79.
59 Stevers, 282–85.
60 Van Zanden, *The Economic History of The Netherlands*, chap. 4.

er prices, resulting in higher wages. Thus, the result of a large public sector was ultimately spiralling inflation.[61]

Not long after Stevers' initial publication, Heertje, together with the journalists Kees Tambour and Frans Nypels, popularised this narrative, using the fate of cyclist Tom Simpson as a tragic parable. In Heetje, Tambour and Nypels' narrative, Simpson, a working-class boy, found it hard to keep up with the increasing professionalisation of bicycle racing. Using drugs to enhance his performance, his body could not take the pressure. Finally, in the Tour de France of 1967, on July 13th (an exceptionally hot day), Simpson collapsed on the steepest climb of the Mont Ventoux, dying in the medical helicopter on the way to hospital. The professionalisation of bicycle racing was like the professionalisation of the welfare sector, Heertje and co-authors suggested. The wellbeing policies of the 1960s had attempted to increase the happiness of individual by introducing education, culture and recreation programmes. It had created a whole new professional class of social workers, teachers, artists and librarians. But similar to how the professionalisation of bicycle racing did not necessarily enhance the viewing pleasure of the spectator, the professionalisation of wellbeing did not automatically enhance the happiness of the average citizen. Meanwhile, the Dutch economy, artificially raising its welfare through the inclusion of more public goods in its price indexing, was like Simpson's drug abuse: It was an attempt to keep the disposable income on par with the rising inflation caused by the increase in social policies. Like Simpson's body, the private sector could no longer take the rising inflation: The economy would break down, as did Simpson, on the steepest climb of the Tour.[62]

In the article written five years later for the ESB when rising unemployment was a well-established fact, Stevers located the blame for the inflationary spiral within the corporatist system.[63] Similar to what Drees had done twenty years earlier, Stevers made use of a public choice framework. Although the solution to the whole stagflation crisis was, in Stevers' view, to decrease government spending, he had little hope that the government

---

61 Cees de Galan, "Werkloosheid en collectieve bestedingen," *Orbis Eonomicus*, December 1977, 11–18.

62 Arnold Heertje, Frans Nypels, and Kees Tamboer, *De verwording van de economie voor de arbeider, ondernemer en kruidenier verklaard* (Amsterdam: De Arbeiderspers, 1976), chap. 4.

63 Theo Stevers, "Is Het Overheidsbeleid Endogeen?," *Economische En Statistische Berichten*, 1976, 1037–40.

would actually do so. Similar to Drees' analysis, Stevers asserted that government spending was not completely autonomous—able to change at the government's political whim—but could be described as endogenous to a wider economic system. State finance was stuck in a spiral in which more spending led to higher wage demands by trade unions, unemployment, and higher taxes, which led in turn to more spending. Whilst this analysis had already been made by Drees, Stevers used public choice theory, not only to attack bureaucracy, but also interest groups. He argued that the complicity of politicians and unions in the inflationary spiral was caused by the influence of interest groups. In contrast to the general labouring population, interest groups only represented partial interests and had little eye for the overall negative consequences of their actions.

Also different from Drees was Stevers' application of marginal utility theory to elucidate why unions and political parties were willing to listen to minorities even if those would only make up a small part of their support. Since interest groups were the most volatile members of their constituencies, keeping them on board was vital for electoral success. Unions and parties were thus eager to facilitate their wishes, even if it went against the interests of the majority of their loyal voters. Under the influence of minorities, political organisations kept on pressuring for higher wages, and high-levels of government expenditure, even when they knew that the consequences could be grave.[64]

Stevers' use of public choice was more in line with Buchanan and Tullock in its focus on the preferences of the individual agent, rather than the institutions they represented. The actions of the agent representing, for example, a union should not be explained in reference to the interests of the union itself, but rather, from the behaviour of individual union members. This also applied to the behaviour of bureaucrats: They did not represent their respective department, but acted in accordance with the interests of that department out of self-interest. More money for the department for which civil servants were working meant more job security, more opportunity for promotion, and higher wages.

Stevers most dramatic statement on the matter came in an op-ed for *De Volkskrant* in 1976. Stevers warned that the growth of public spending could be equated with unlimited growth in the public sector, which would soon 'trample' the private sector, ending capitalism. Here it becomes clear

---

64 Stevers, 1039.

that Stevers' real concern was not so much unemployment or inflation, but rather the crisis itself. With the worsening of the crisis—a likely scenario for Stevers, given the inflationary spiral described above—the unemployment issue could no longer be solved in indirect manners such as increasing the demand in the economy through government investments. With mounting political tensions, Stevers predicted that the government would take more extreme measures to counter unemployment: directly intervening in the management of businesses and forcing the unemployed into work. This was not only the end of free enterprise, but also of democracy, since the "bureaucracy apparatus [would] grow and become more powerful," giving bureaucrats all the decision-making power.[65] Wellbeing policies, corporatism, and Keynesianism had driven the political-economic system to breaking point and beyond this point, waited an authoritarian technocratic state and the end of free enterprise. In Friedman's terms (who strongly influenced Dutch neoliberal discourse), it was "a line we do not want to dare to cross."[66]

One of Stevers' fiercest critics was the economists Hans van den Doel, a member of the Amsterdam School and an active member of the New Left initiative within the Labour Party. Van den Doel is a remarkable figure. Although a committed socialist, he shared Stevers distrust of the corporatist system and used the same methodology—public choice theory—to formulate his arguments. But the conclusion he derives from this analysis mirrored those of Stevers. Van den Doel also agreed with the CPB that the rising costs of social insurances were passed on to employers, and that returning to wage moderation measures was the most effective way of countering unemployment. Accordingly, he scolded the trade unions for sticking to their demands for higher wages.[67] However, contrary to Stevers, Van den Doel did not blame minority interest groups within the unions and political parties for the predicament. On the contrary, he argued that the union reaction was understandable: Employers first tried to pass on the cost of social insurance to employees by restraining wages. As a reaction, the unions tried, in turn, to pass the cost back to the employers. To Van den Doel, the unwieldy corporatist system was ultimately the cause of an unproductive "blame game"—one that lacked a clear decision-making structure and was easily manipulated to

---

65  Theo Stevers, "Daling werkloosheid vrome wens," *De Volkskrant*, September 22, 1976.
66  Milton Friedman, "The Line We Dare Not Cross," *Encounter*, November 1976.
67  Van den Doel, *Het biefstuksocialisme*, 75.

the benefit of CEOs, with the result that the costs of social insurance were endlessly tossed around.[68]

Notwithstanding the common ground they shared, Van den Doel and Stevers clashed completely in their evaluation of the growth of the public sector.[69] Van den Doel applauded the move to index the wellbeing of citizens beyond basic economic necessities. For him, it indicated a move beyond what he called "beefsteak socialism"—a form of welfare economics that only focussed on economic growth and wellbeing in the narrow sense, akin to Kenneth Galbraith critique in *The Affluent Society* (1958, see previous chapter). The problem, as he saw it, was that this rise in wellbeing, broadly conceived, was incompatible with the rise in wages. Higher wages on their own did not mean much beyond increased consumption, and they certainly did not make the citizen happier. If there was a social trade-off between more public services and wages, the choice was easily made.[70] In the words of van den Doel:

> [P]eople are not standing in line for more gasoline, more vacations, more alcohol. They are standing in line in the waiting room of the doctor, in hospitals, for more social work for the weaker in society, for more education for their children. These are the real basic needs of the individual.[71]

Stevers', Heertje's, and Van den Doel's criticism on wage politics spoke of a deeply ethical concern for the spiritual wellbeing of the consumer. Like the analysis of the problems of modern society by the OECD (discussed in the previous chapter), all those concerned sensed that accelerating economic growth had changed the value patterns of the citizen and with those different norms and values came different preferences. Heertje considered the consumer "spoiled" by social welfare—that demand for social services was artificial—whilst Van den Doel, in contrast, considered the preference for public goods a positive change.

The implications of this relationship, between the experience of acceleration and ethical concerns, can be teased out by comparing it to the more futurist and existentialist account of Bob Goudzwaard—a Christian econo-

---

68  Van den Doel, 44.

69  Erik Fokke and Wiemer Salverda, "Kritiek op visie van prof. Stevers," *De Volkskrant*, September 20, 1975.

70  Van den Doel, *Het biefstuksocialisme*, 60.

71  Van den Doel, 55.

mist and advisor to the ARP. In *Capitalism and Progress* (1976), Goudzwaard had argued that capitalism had led to soulless consumption and utilitarianism. Moreover, the recent environmental problems were yet more proof of the unscrupulous drive of modern capitalism. However, now that *The Limits of Growth* (1972) and inflation had shown that economic growth could no longer be a goal into itself, humanity was freed from the progress of modern capitalism. In other words, human beings were free again to imagine a future not driven by economic progress. New norms and values could be fostered in relation to this open future.[72]

Van den Doel reacted to Goudzwaard's argument by asserting that the freedom to choose a better society was an opening up not born of the failings of capitalism, but rather by its success. Citing Joseph Schumpeter, he argued that capitalism undermined the cultural ground on which it was built.[73] The critical consciousness emerging in a younger generation that steered away from mindless consumerism towards the valuation of environment, education, and emancipation was therefore a consequence of capitalism.[74] In the crisis of capitalism, a new spirit of socialism was emerging. Following Tinbergen's idea of convergence (see chapter two), Van den Doel stated that the demand for more public services was part of economic development beyond capitalism. Gleefully citing Zijlstra, who had warned in 1956 that capitalism would not survive another unemployment crisis like the one following the Great Depression, Van den Doel welcomed the socialism that would follow it, now that the second great unemployment crisis of the 20th century had become a reality.[75]

In the economists' debate, it became clear that the economic crisis went beyond unemployment and public finances. At stake was the corporatist system, unclear decision making, the definition of wellbeing, democracy and the state, and the norms and values of society. Above all, the participants in the debate thought that the old political-economic order was about to break down. However, the causes of this breakdown were inherent to the order itself—it had created its own problems, just as the acceleration of economic growth had caused environmental and social problems. In fact, these de-

---

72  Bob Goudzwaard, *Kapitalisme en Vooruitgang* (Assen: Van Gorcum, 1976), IX.
73  Van den Doel, *Het biefstuksocialisme*, 14; Joseph Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper & Brothers, 1942).
74  Van den Doel, *Het biefstuksocialisme*, 28.
75  Van den Doel, 19.

velopments seemed to be one and the same: A broader notion of wellbeing had initiated unprecedented growth in the public sector and fostered a new generation of critical citizens (as Van den Doel would have it), or spoiled mindless consumers (as Heertje thought). The participants of the economists' debate were experiencing time in an accelerating manner through the quickening of the negative tendencies of the mixed economic order. However, this acceleration seemed to meet its breaking point. It could not keep up this speed any longer, like Simpson could not keep on climbing an increasingly steep mountain side.

## 5.3 Democratisation and Its Discontents

The discussion of the corporatist system in terms of public choice and Stevers' warning of an authoritarian government made it clear that the economic problems of the mid-1970s were closely intertwined with discussions on democracy, the state, and social services. In this section, I will argue that these discussions should also be understood as a reaction to the democratisation agenda of the Dutch government that gained pace under the social planning policies of the late 1960s. In particular, the attempt to involve new social organisations, such as environmental protection agencies and social workers councils into the decision-making process. For the detractors of the democratisation agenda, these social organisations appeared as shadowy interest groups, attempting to pull the string behind the back of the average citizen. Together with the issues raised in the previous section, these discussions show how the ideal of social planning became discredited and how an alternative planning ideal was formulated.

In 1966, when the New Left published their first manifesto with their strong demands for democratisation, the Labour Party establishment was quick to pick up these demands, putting them on the agenda of a committee on democratisation, led by Den Uyl, which was founded in the same year. The resulting report published a year later, *A Vote That Counts*, focussed primarily on parliamentary reforms in line with its original agenda of fostering a stronger ideological opposition in parliament (itself a renewed attempt of the Breakthrough movement).[76] However, the chairmen of the party, Sjeng

---

76 Bram Mellink, "Tweedracht maakt macht. De PvdA, de doorbraak en de ontluikende polarisatiestrategie (1946-1966)," *BMGN - Low Countries Historical Review*

Tans, stressed in his introduction that "a well-functioning parliament does not stand on its own. Equality of all citizens should also be expressed in reorganising the structure of our society."[77] Accordingly, the report argued that besides political parties, "also other political organisations, action committees, ad-hoc groups and clubs, should indirectly participate in [a political] coalition,"[78] thus arguing for the participation of extra-parliamentary political movements in the Labour Party. In the 1970s, this strategy became known as the "action party" ideal that the Labour Party had to strive to emulate.

However, by the mid-1970s much of this initial enthusiasm for democratisation had disappeared, for some even turning into strong feelings of discontent. One of the best expressions of this dissatisfaction can be found in the writings of Professor of political sciences at the University of Amsterdam and Labour Party member Hans Daudt. Although Daudt had previously been committed to democratisation, at least in name, he took a profound U-turn in the early 1970s, especially regarding what he considered "good" democratisation actually entailed. Whilst in 1967 he had contributed to the *A Vote That Counts* report, endorsing its "action party" message, by 1976, he decried that very same democratisation ideal as

> a confused democratic ideology, prescribing that democracy would not only imply that everyone has the right to bring all their preferences into the process of political considerations but in addition, that everyone would have the right for their preferences to be satisfied.[79]

As in Stevers' diagnosis of the national budget, Daudt laid the blame for this "confused democratic ideology" with interest groups. The notion of the interest group had been central to the pluralist school in American political science, associated with names such as Robert Dahl and Seymour Martin Lipset, whose works Daudt had helped to introduce into Dutch political science.[80] As briefly discussed in the third chapter, the pluralist school thought

---

126, no. 2 (January 2011): 48–53, https://doi.org/10.18352/bmgn-lchr.7309.

77 Den Uyl et al., *Een stem die telt*.

78 Den Uyl et al., 52.

79 Hans Daudt, "De Politieke Toekomst van de Verzorgingsstaat," in *De Stagnerende Verzorgingsstaat*, ed. Jacques Van Doorn and Kees Schuyt (Amsterdam: Boom uitgevers, 1978), 202.

80 Hans Daudt, "Het Politieke Gedrag," in *Politiek*, ed. Lucas van der Land, vol. 1,

of the state as a neutral framework that had to turn the preferences of multiple interest groups into effective policy. A similar focus on interest groups was also evident in the *A Vote That Counts* report. The report made a distinction between action committees, pressure groups, and interest groups. Action committees were generally evaluated positively, whilst pressure groups were perceived to be more of a mixed bag. Pressure groups could not only undermine the primacy of the parliament and the representative character of the political system, but also play a vital role in involving citizens in the policymaking process.[81] Such an assessment corresponded to Daudt's own academic research on pressure groups within the EEG: If properly regulated, they could be a valuable addition to the democratic process.[82] Moreover, pressure groups were seen as an essential counterweight to the power of bureaucratic elites. Interest groups, however, were seen as a negative force. As would later become clear in Van den Doel's negative assessment, interest groups represented the interest of the establishment—their aim being to prevent the growing influence of the people on the political process. Such groups consequently had to be opposed and excluded from political coalitions.[83]

Following the student occupation of the Maagdenhuis, when the University of Amsterdam embarked on an internal process of democratisation, Daudt experienced first-hand what the "reorganising the structure of our society" actually entailed. Daudt had fierce clashes with his students, who demanded that he teach Marx and the scholars of the Frankfurt School—something he refused to do. The students demanded his resignation and Daudt was only able to stay following an intervention by the state-secretary of education and science.[84] As a result, Daudt's assessment of the democratic spirit of the 1960s grew increasingly bitter over the course of the 1970s and the differentiation between action committees, pressure groups, and interest groups disappeared from his work in this period.

---

Repertorium van de Sociale Wetenschappen (Amsterdam: Elsevier, 1958), 182–204.

81  Den Uyl et al., *Een stem die telt*, 27–28.

82  Hans Daudt, *Pressiegroepen in de EEG*, vol. 3, Europese Monografieën (Deventer: N.V. Uitgeversmaatschappij Æ. E. Kluwer, 1965).

83  Den Uyl et al., *Een stem die telt*, 81–82.

84  Hans Daalder, "Over standvastigheid en lafhartigheid in de academie: Een geschiedenis van de "zaak-Daudt," in *Echte Politicologie. Opstellen over politicologie, democratie en de Nederlandse politiek*, ed. Hans Daudt (Amsterdam: Bert Bakker, 1995), 40–86.

Indeed, when in 1976, Daudt analysed the Dutch democratisation process, he reframed the idea as follows: "[M]ore and more demands […of] groups whose preferences were previously not expressed, or less explicitly expressed, enter as points of conflict in the sphere of political decision-making."[85] In short, Daudt understood newly emancipated social groups such as women, students, eco-activists, and workers as interest groups whose demands had entered the political sphere via a process of democratisation. The problem, Daudt argued, was that the demands of these groups were overburdening the state, and the state did not (yet) have the capacity to comply with their wishes. The state, therefore, had two options: either to expand public services to meet all the demands, thereby allowing the public sector to grow significantly, or only serve the interests of a select few interest groups.

In line with the work of two British neoliberal authors Samuel Brittan and Robert Moss, Daudt argued that neither option was particularly attractive, not least as a growing welfare state would over-burden the private sector, resulting in an economic crisis. Here, Daudt turned to the earlier argument by Friedman. Although considering Friedman's argument overly simplistic, he agreed with the general conclusion.[86] For the second option, Daudt used public choice theory to argue that a government in power serving only minority interest was actually possible in a representative democracy. In this formulation, minorities would forge alliances with bureaucrats as both had a shared interest in a growing welfare state—minorities to meet their demands, bureaucrats since a large state meant stability and employment security.[87] However, serving only selected interest groups would result in the disillusionment of the majority of citizens with the democratic system, resulting in anti-democratic sentiments.[88] From this dire analysis, Daudt drew the implicit conclusion that a growing welfare state would eventually end capitalism and democracy.[89]

Turning now to the root cause of this predicament, Daudt cited the

---

85  Daudt, "De Politieke Toekomst van de Verzorgingsstaat," 201.

86  Hans Daudt, "Verzorgingsstaat, democratie en socialisme," in *Het eerste jaarboek voor het democratisch socialisme* (Amsterdam: De Arbeiderspers, 1979), 23.

87  Daudt, "De Politieke Toekomst van de Verzorgingsstaat," 207; see also: Hans Daudt and Douglas Rae, "The Ostrogorski Paradox: A Peculiarity of Compound Majority Decision," *European Journal of Political Research* 4, no. 4 (1976): 391–98, https://doi.org/10.1111/j.1475-6765.1976.tb00542.x.

88  Daudt, "De Politieke Toekomst van de Verzorgingsstaat," 202.

89  Daudt does not say so explicitly, but instead references cases in which, according to him, it had already happened, see: Daudt, 198.

welfare state itself: "In the welfare state, more and more demands enter as points of conflict in the sphere of political decision-making. This is, in the first place, a consequence of government involvement in more and more facets [of society]."[90] Daudt thus agreed with Stevers and Van den Doel that the crisis of democracy was inherent to the politico-economic order itself. Moreover, his invocation of increasing state intervention in society was a clear reference to the discourse on social planning. In the same way social planning had argued that the management of multiple developments of society (economic, social, cultural, technological, and environmental) was necessary to tackle the problems of the future, government meddling in those areas was a result of the problems economic growth policies had caused in the first place. In a later essay, he mocked social workers as the symbol of the new planning ideas, writing that social workers formed an "expanding army of civil servants and semi-civil servants performing tasks not welcomed by everyone. […T]he many vacancies for social workers in newspapers are requiting for the new priestly caste."[91]

Although Daudt was particularly pessimistic in his analysis, his concern for the influence of interest groups on politics was more widely shared within the Labour Party. Labour's democratisation strategy in the late 1960s had been to become an intermediary between the concerns of the bottom-up social movements and state apparatus, identifying itself as a participatory, or "action" party. Yet, according to its critics, this ideal had led to clientism and the exclusion of majority interest. For example, party ideologue and stern opponent of the New Left movement, Bart Tromp, feared that the party had been taken over by interest groups in the form of social movements. Pushing for their own specific agenda, there was a danger that social movements would exclude the common good, he argued.[92] By the mid-1970s, Tromp warned the Labour Party had become "a go-between for the demands of interest groups with their own clientele,"[93] which could only be to the detriment of the truly deprived who had yet to find their voice in the political debate.

Daudt's solution to this quandary was to restrict democracy by finding a

---

90 Daudt, 201.
91 Daudt, "Verzorgingsstaat, democratie en socialisme," 358.
92 Bart Tromp, "Socialisme, organisatie en democratie," *Socialisme en Democratie* 33, no. 4 (April 1976): 155–72.
93 Tromp, 163.

means to break the presumed grip interest groups held on the state apparatus. One of the ways in which this was possible, he argued, was to only allow parliamentary voting on outlines of policy whilst leaving the details for policymakers to figure out.[94] In this manner, interest groups had less opportunity to manipulate the details of policy to their own benefit. Moreover, Daudt proposed the use of plebiscites in order to correct policymakers when they threatened to stray too far from the majority interest. In other words, plebiscites were a good mechanism to protect majority interest against minority interests.[95] Such proposals were in the same spirit as the budgeting norms proposed by Drees and later Stevers: shielding part of the policymaking process from the influences of parliament, unions, and interest groups in order to protect the political and economic order.

When, in 1976, Duisenberg wrote his alternative party manifesto for the Labour party, he appealed to the same principles. An alternative programme was necessary, according to Duisenberg, because the existing one was too reflective of the partial interests of minorities and was, therefore, much too long. "Is it not the natural inclination of an administrator to seek freedom to manoeuvre and not to be hindered by a 'participatory party'?,"[96] was the rhetorical question posed by Duisenberg suggesting, in other words, that interest groups bounded politicians too much, making it impossible for them to properly fulfil their role. To counter this, he proposed fixing the baseline of policies over multiple years, excluding them from democratic voting, whilst leaving the details to parliament. Although Duisenberg's proposal was the opposite of Daudt's, it was based on the same intent and rationale.

---

94 Daudt, "De Politieke Toekomst van de Verzorgingsstaat," 199.

95 In literature on neoliberalism and democracy, it is commonly understood that the aims of neoliberalism with regard to democracy are precisely the opposite: that restricting majority interest is the neoliberal goal. See, for example: Philip Mirowski, *Never Let a Serious Crisis Go to Waste: How Neoliberalism Survived the Financial Meltdown* (New York: Verso, 2013); Nancy MacLean, *Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America* (New York: Viking Press, 2017); Wendy Brown, *In the Ruins of Neoliberalism: The Rise of Antidemocratic Politics in the West* (New York: Columbia University Press, 2019). Few authors have pointed out that plebiscites are the exception to this rule. For examples, see: Thomas Biebricher, "Neoliberalism and Democracy," *Constellations* 22, no. 2 (June 2015): 255–66, https://doi.org/10.1111/1467-8675.12157; Quinn Slobodian, "Demos Veto and Demos Exit: The Neoliberals Who Embraced Referenda and Secession," *Journal of Australian Political Economy,* Vol. 86 (December 2020). However, a thorough study of the relation between neoliberalism and plebiscites is still missing.

96 Wim Duisenberg, "Een alternatief verkiezingsprogram," *Socialisme en Democratie* 33, no. 5 (May 1976): 211.

Instead of binding the politician to the demands of the civil society, as the ideal of an "action party" seemed to imply, Duisenberg proposed curb the influence civil society by introducing an independent baseline for a policy agenda that politicians could follow. This meant that politicians could adhere to the baseline if their action deviated from the wishes of civil society—in particular, those of the interest groups. This was precisely what neoliberal authors imagined the models of the CPB could assist policymaking achieve. Using growth models, it was possible set out mid-term strategies on how to manage the state's finances. This wish was tied up with the idea of implementing more stringent budget norms. In 1972, in advance of the general election of that year, the Study Group for Fiscal Space (Studiegroep Begrotingsruimte) was founded by high-ranking members of the Ministry of Finance. Rutten, from the Ministry of Economic Affairs, and CPB members participated, and together they calculated the development of the state finances in the coming cabinet period.[97] However, Rutten found the results disappointing, not least because, as the VINTAF model was yet to be developed, the CPB was unable to calculate the mid-term inflation rate accurately.[98]

This sentiment was echoed by Stevers in an article for the ESB in 1974. In the article Stevers explained that the study group had not linked the inflation rate with the price indexes and exchange rates, and therefore failed to see how the growth of the public sector would influence the price indexes and exchange rates. If the growth in gross domestic product was caused by a growth of the public sector, the fiscal space still allowed government expenditure to rise which, for Stevers, would defeat the purpose of a budgetary norm. Instead, Stevers argued the budgetary norm should be coupled to the mid-term forecasts of the price index figures produced by the CPB (which could now be predicated using the VINTAF model).[99]

Stevers acknowledged that his proposal for a budgetary norm was, in one sense, undemocratic, when he asked: "[D]oes this amount to deceiving the people? Partly yes, but only if one has a one-dimensional vision on the

---

97 Studiegroep Begrotingsruimte, "Kwantitatieve uitgangspunten voor het trendmatige begrotingsbeleid in de komende jaren," Kamerstukken II, 1971–1972, 11 780, no. 2 (1972).

98 Interview Jarig van Sinderen by Merijn Oudenampsen (2019), unpublished manuscript; 'Enige bespiegelingen over het door de Studiegroep Begrotingsruimte uit te brengen rapport', Hans Weitenberg, 15 June 1973, NL-HaNA, CPB, 2.06.093, inv.nr. 251.

99 Theo Stevers, "Vijfde rapport studiegroep 'Begrotingsruimte,'" *Economische Statistische Berichten* 59, no. 2958 (July 1974): 574.

matter."[100] However, for Stevers, this norm was more democratic than the alternative, which was too complex and allowed for meddling in the margins, resulting in unclear decision making. At least a simple norm offered transparency and could easily be communicated in the national newspapers. It was therefore in essence at least more democratic, even if it meant that citizens had less of say in state policy.

The call for budget norms that made use of the mid-term forecasts of the VINTAF model was also made within the vestiges of the WRR, which after its rocky start in 1972, was quickly building a reputation as an influential government advisor (see previous chapter). In 1977, writing on the problem of unemployment, the sociologist Henk van Stiphout argued that if unemployment was to be tackled, it was necessary that the public sector only grew relative to the private sector and not relative to the growth in GDP, as Duisenberg's 1% norm or the Study Group for Fiscal Space had suggested. He proposed that the private sector created the basis (*draagvlak*) on which the public sector could grow; if the public sector grew too large, its base would collapse, resulting in unemployment.[101] However, restricting the public sector was difficult, since reliable indicators to predict the influence of its growth on the private sector were missing. He hoped that mid-term macroeconomic forecasts, like those of the CPB, could solve this issue.[102]

It would, however, take until 1980 for the idea of mid-term forecasts as a base-line for policymaking to become more concrete proposals. It was, I would argue, a new planning ideal in the making. Another WRR report, *The Place and Future of Dutch Industries* (1980), played a vital role the concretisation of this planning ideal. This report followed from a fierce public debate in the second half of the 1970s on the political implications of the use and development of technology. As will become clear, the discussion on technology resonated with many of the themes already discussed, such as decision making and democracy. To properly understand the context of the report and the continuation of neoliberal themes, the next section will outline this discussion on technology.

---

100 Stevers, 572.
101 Wetenschappelijke Raad voor Regeringsbeleid WRR, *Maken wij er werk van? Verkenningen omtrent de verhouding tussen actieven en niet-actieven*, Rapporten aan de Regering 13 (The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1977).
102 WRR, 151.

## 5.4 The Politics of Technology

For all its impact on the public debate on unemployment, the VINTAF model conveyed a confusing message concerning technological development. Unemployment was caused by the rapid replacement of capital goods in industry spurring automation. However, this development did not appear to be controllable in the CPB's model. This begged the question: If the government *was* able to control technological development, could they counter unemployment by slowing down automation? This suggestion bore some far-reaching political implications as industrialists feared that hampering technological development would undermine the competitive position of Dutch industries on the international market. The idea, nonetheless, was now out in the open and the question whether state control over technology was desirable was discussed at some length in the Dutch media in the following years.

This issue arose precisely at a time when technological development was being fundamentally questioned in the light of the *Limits of Growth* (1972) by the Club of Rome. Question arose, such as: Had technological development not caused the polluting industries and the increased use of fossil energy? Was technology then not to blame for the environmental problems and depletion of recourses? These issues were put (often with some force) on the agenda by the smaller left-wing parties. In 1974, the PPR published a manifesto called *The Cracks in Growth*, in which they outlined the negative effects the everyday use of technology was having on the wellbeing of human beings and the environment.[103] Sicco Mansholt, a leading figure in the Labour Party, former president of the European Committee, and instrumental organiser of the coalition between left-wing parties at the start of the 1970s, wrote the preface, stating that the ideas of the manifesto were the logical outcome of the progressive coalition he had started two years earlier.[104]

A third dimension to this discussion was the impact, as a form of instrumental reason, that technology had on society and government.[105] In 1980,

103 Yannick Heijmans, "Hart voor het milieu: De ontwikkeling van de milieupolitiek van de PPR, 1968-1989" (Master-Thesis, Nijmegen, Radboud Universiteit Nijmegen, 2019).

104 Leo Jansen et al., eds., *Barsten in de groei: productie en konsumptie tegen de achtergrond van welzijn, derde wereld, milieu en macht* (Baarn: Wereldvenster, 1974), 7.

105 A fourth problem surrounding technological innovation, which for reasons of space is not discussed here, was the issue of "third-world economies". It was feared that the fast technological innovation of industrialised countries would further wid-

the biologist and eco-activist Lucas Reijnders warned that technology possessed its own particular logic, which was at odds with the ordinary logic of the average citizen.[106] Technology was not a neutral means for industry and the government to achieve their aims, but instead had an agenda of its own. Thus, the stimulus of economic growth through technological innovation was not an accident, but rather was inherent to technology itself. Via the use of technology, controllability and efficiency became goals in their own right, striving for ever increasing production capacity through the control of both human and earth recourses. A particularly popular form of this critique in the Netherlands was voiced by the former priest Ivan Illich in his book *Tools of Conviviality* (1973). Illich, part of the liberation theology movement in South America, warned that it was no longer human beings who controlled technology, but rather technology that determined the goals humans pursued. Meanwhile, newspaper columns were flooded with warnings of information technology that would take away the privacy of the citizen—that if the state was to use such means, it could exert increasing influence and control over society.[107]

When, in the wake of the oil crisis, stagflation hit the Dutch economy, the Den Uyl cabinet responded by reforming the previous "selective growth" policies.[108] These policies were initially a response to the SER's call for sectoral policies (see section 4.1) and were combined with the concerns of the Club of Rome report.[109] The policies were intended to stimulate growth in those sectors that would improve the quality of life for citizens, whilst simultaneously disincentivising growth in polluting sectors, thus striving to

---

en the gap between developed and developing countries. Simply "giving" developing countries new technology was also seen as undesirable, unwanted interference, and the promotion of a "Western" form of instrumental thinking. This fourth dimension of the technology debate is less pronounced in the later commentaries since these issues was largely ignored by right-wing commentators. See: Karel E. Vosskühler, "Overdracht van technologie en internationale arbeidsverdeling: De toenemende noodzaak van publieke controle," *Socialisme en Democratie* 34, no. 9 (September 1977): 417–28.

106 Lucas Reijnders, "Dan maar Albanië," *Socialisme en Democratie* 37, no. 2 (February 1980): 78–80.

107 Gerda Jansen Hendriks, "De burger in kaart: De Volkstelling in 1971," *Andere Tijden* (Hilversum: NTR & VPRO, October 1, 2011).

108 'Nota inzake de Selectieve Groei (Economische Structuur nota)' Kamerstuk Tweede Kamer 1975-1976 kamerstuknummer 13955 ondernummer 2.

109 Kees Schuyt and Ed Taverne, *1950: Prosperity and Welfare*, Dutch Culture in a European Perspective 4 (New York: Palgrave Macmillan, 2004), 118.

restrain the uninhibited growth the Club of Rome warned for. Additionally, faced with the unemployment crisis, the new selective growth measures tried to stimulate growth in those sectors that could potentially create the most jobs. Den Uyl, however, was clear that the sector relying on fossil fuel still had to be restricted. To him, the oil crisis provided an opportunity to make Dutch society less dependent on oil. Instead, the less polluting gas reserves of the Northern Netherlands had to be utilised more. In an era-defining speech, he stated:[110]

> This shortage makes us suddenly realise that we always had this shortage of energy in the world. We cannot continue with the use of finite fuels and resourses as we did in the past quarter-century. The world from before the oil crisis will never return. We have to focus on a more economical use of recourses and energy. Our way of being will change, and certain outlooks will no longer be possible. But this does not mean that our existence should be any less happy.[111]

The words "the world from before the oil crisis will never return" proved to be prophetic for all the wrong reasons, as succeeding cabinets did everything they could to return to this old world. However, the following cabinet, led by Christian Democrat Dries van Agt, continued the selective growth policies.[112] Whilst Van Agt acknowledged the fears of a society controlled by technology, at the same time, he attempted to unify those concerns with the wish for more technological innovation by industrialists. It was a fine line to walk and Van Agt did what most Dutch governments do when an issue becomes too politically sensitive, and delegated the task to an expert committee. To this end, he installed a committee led by the physicist Gerhart Rathenau to map

---

110 After his time as prime minister, Den Uyl became an almost mythical figure. For the Left he represents the last and perhaps only truly socialist prime minister the Netherlands ever had—a promise cut short by the oil crisis and a neoliberal takeover. For the Right, he became the archetypal stern, paternalistic ideologue, who could not realise that his morals were worth nothing when faced with reality—an archetype that fortunately withered away from politics after the 1980s. Both the left- and right-wing myths do not do justice, either to Den Uyl, or to his actual politics. I have to admit that this chapter cannot give the full nuanced picture. For this complex legacy, see: Ilja Maria Van den Broek, *Heimwee naar de politiek : de herinnering aan het kabinet-Den Uyl* (Amsterdam: Wereldbibliotheek, 2002).

111 Joop den Uyl, "Speech on the Oil-Crisis" (Hilversum: Nederlandse Omroep Stichting, December 1, 1973).

112 'Regelen ter stimulering en sturing van de investeringen (Wet investeringsrekening)', kamerstuknummer I, 1977-1978, 14377 no. 69c.

out the social effects of the large-scale development and implementation of microelectronics—the most prominent technological development of the decade. Meanwhile, behind the scenes, the WRR was tasked to find a way forward in the swamp of opposing ideological positions.[113]

In November of 1979, Rathenau presented his report on micro-electronics. Answering to the social concerns of the time, the committee—consisting mainly of professors of the natural sciences with one from the humanities—framed the question concerning the development and implementation of microelectronics employing a set of twelve core principles of social democratic Dutch society. The committee asserted "that every new technology should imply an enrichment of society and cannot undermine its foundations [i.e., the core principles]."[114] In other words, it was the committee's task to find ways of implementing microtechnology without damaging the core principles of society. Thinking along these lines, the committee argued that the use of technology promoted an instrumental type of thinking, stating that there is "a genuine risk if one does not realise that the [technological] development is controlled from a kind of thinking that is stimulated by that very same technology."[115] Moreover, the report stressed that "information exchange by computers [...] could lead to ridged bureaucracy and [...] the accumulation of power in large organisations, such as the government and businesses."[116] Consequently, the report, in the spirit of the critical theory writings of the time, stated that "the choice for technology should not be an automatism."[117]

At the same time, however, in reference to the international position of the Netherlands, the committee asserted that the implementation of microelectronics was inevitable. The key word that could overcome the ideological difference between technology as a danger and a necessity for economic prosperity was "education". Citizens could be made more conscious of the danger and logic of technology, thereby finding a new agency to wield technology beyond the ends propagated by technology itself. Simultaneously, education could also make the citizen more "technology-savvy", and thus better able

---

113  Munise Varisli, "Genzen aan de Groei? Sociaal-economische debatten in Nederland in de jaren 1971-1983" Master thesis (University of Amsterdam, 2018), 29.
114  De Commissie Rathenau, *Rapport van de Adviesgroep Micro-Elektronica* (The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1980), 8.
115  De Commissie Rathenau, 67.
116  De Commissie Rathenau, 68.
117  De Commissie Rathenau, 8.

to utilise the opportunities of technology in a competitive global market.[118] Students with a talent for computer programming had to be stimulated at a very young age in order to keep up with the competition, and workers who lost their job due to automation could, with the right education, find new work in technology driven sectors. Moreover, the committee advised instituting so-called technology assessments in order for the government to have a better grasp of the social effects of technology on a more structural level.

It was clear that the report attempted to steer precisely between the Charybdis of the technology critics and the Scylla of innovation enthusiasts, and although the report proved to be hugely influential, its emphasis on social democratic core values was not enough to convince the critics that the committee had tackled the question of the politics of technology adequately.[119] It was especially the absence of the issue of decision making that drew the ire of the report's critics. From the Left wing of the Labour Party, Den Uyl, now opposition leader, repeated the mantra of the report that technological innovation should not be seen as an automatism, but a choice—albeit, "a choice for who?," as Den Uyl asked.[120] He noted that the role of the labour unions in assessing the desirability of technology was completely absent in the report. Den Uyl referenced a report written by the union of the service sector from the previous year, which calculated that the introduction of micro-electronics would cause job losses of 100,000. With such clear consequences, "why is it then that an atomisation-tax [was] out of the question?", Den Uyl wondered.[121] From the Right wing of the Labour Party, Arnold Heertje similarly criticised the report for "leaving the question of democratisation of the decision-making out of the picture."[122] To him, the central question was: "[W]ho was to choose for technology?"[123] Such decisions could only commence on

---

118  De Commissie Rathenau, 11.

119  The report was directly followed by a report from the London-based consultancy firm Metra, commissioned by the Ministry of Social Affairs, and a report from the Social Economic Council, both of whom came up with similar recommendations. It was also the starting point for a series of reports on information technology that were published up to the mid-1980s.

120  Joop den Uyl, "Micro-elektronica als politiek probleem," *Socialisme en Democratie* 37, no. 3 (March 1980): 122.

121  Joop den Uyl, "Amsterdamse School en economische politiek," *Socialisme en Democratie* 37, no. 1 (January 1980): 10.

122  Arnold Heertje, "Wel micro-electronica, geen micro-economie," *Socialisme en Democratie* 37, no. 2 (February 1980): 76.

123  Heertje, 76.

a decentralised level, Heertje argued, since a centralised government had no suitable instrument with which to determine what individuals value in technology, and it was precisely this subjective value that should matter when making such choices.

Heertje used the theory of subjective welfare economics to advance his argument for decentralisation—an argument he had been employing in a long series of articles, newspaper columns, and reports from the mid-1970s onwards.[124] Following his mentor, the abovementioned neoliberal Hennipman, Heertje asserted that the valuation of goods or services was always subjective and, as a result, valuations were broader than valuations made in purely quantified terms (such as in the case of monetary value), and differed from person to person.[125] Central governments had no instruments to measure these individual valuations and therefore were badly equipped to make predictions on the development of the demands of goods and services in the economy. More decentralised decision architectures, especially markets, were far more suited to finding out how goods and services were valued. The argument was, at its core, the same as the scepticism voiced in 1935 by Hayek and Ludwig von Mises against central planning.[126] Markets and technological development were too complex for central governments to fully understand. Centralised decisions on technology were, therefore, fraught with danger. Governments were ill-equipped to make estimations of which technology would be most valuated, whilst individual citizens would not have the participatory mechanism to communicate their own valuations.

In a similar vein, the argument put forward by Van Stiphout of the WRR asked: "If one opts in principle for government intervention in eco-

124  For example: D. Furth, Arnold Heertje, and Robert Jan Van der Veen, "Matiging, structurele werkloosheid en technische ontwikkelingen," *Economische en Statistische Berichten* 62, no. 3090 (February 9, 1977): 128–30; Arnold Heertje, *Beheersing van de technische ontwikkeling*, Economische Notities 2 (Amsterdam: Wiardi Beckman Stichting, 1978); Arnold Heertje, "De Wisselwerking van economische en technologische ontwikkeling," in *Samenleving en Technologie*, ed. M. Chamalaun and Eric Jan Tuininga (Amsterdam: intermediair, 1979), 16–26; Arnold Heertje, "Economie, Technische Ontwikkeling en Economie," in *Preadviezen voor de Vereniging van Staathuishoudkunde 1979: Innovatie* (Leiden: H.E. Stenfert Kroese B.V., 1979).

125  For Pieter Hennipman and his welfare economics, see: Martin Fase, "Het economische gedachtegoed van Pieter Hennipman (1911—1994)," *TPEdigitaal* 8, no. 1 (2014): 1–14.

126  In the literature, this is referred to as "the socialist calculation debate", see: Thomas Uebel, "Incommensurability, Ecology, and Planning: Neurath in the Socialist Calculation Debate, 1919–1928," *History of Political Economy* 37, no. 2 (2005): 309–42.

nomic and technological development, the risks that are primarily borne by companies and employees in our economic order must also be placed on the shoulders of the government."[127] Just as an entrepreneur who invests in new technology assumes the risk that the investment might not pay off, so too the government must also take a risk if it chooses to meddle with innovation. The problem, however, is that when an entrepreneur makes the wrong choice of investment, he only damages his own company, whereas, in contrast, if the government were to make a mistake, then society as a whole suffers. Heertje's and Van Stiphout's solution was simple: Questions of technological innovation should be left, as much as possible, to the private sector. This scepticism towards the capabilities of central government resonated with Stever's and Daudt's warnings against the undemocratic tendencies of the public sector. Decision making on technology on the central level could not be done democratically since the influence of interest groups distorted the democratic will of the people.[128]

In the pages of *Socialism and Democracy*, Reijnders similarly drew attention to the absence of the democratisation question in the report. However, his analysis was gloomier, pointing out the dreadful consequences if questions of technological innovation were left to central government. Although the report addressed the issue of the increased control of large organisations due to information technology, it failed to address, at least in Reijnder's eyes, "the slim possibility that a technological [state] apparatus could be controlled [democratically]."[129] The application of computer technology would only further obscure the bureaucratic activities of the state. Given that the report asserted the inevitability of microelectronics, for Reijnder it was a necessity to restrict state bureaucracy and find new ways for democracy. In reference to public choice literature, he asserted that bureaucrats would only follow their own interests, disregarding the interest and wellbeing of the average citizen.[130]

Heertje's and Reijnders' analyses draw attention to ongoing public choice concerns in the discussion of technology. Such technology discus-

---

127 Henk van Stiphout, "Vernieuwingen in het arbeidsbestel in een tijd van economische stagnatie," *Economische en Statistische Berichten* 67, no. 3350 (April 7, 1982): 376–82.

128 Daudt refers to Heertjes work approvingly. For example, see: Daudt, "De Politieke Toekomst van de Verzorgingsstaat," 212.

129 Reijnders, "Dan maar Albanië," 79.

130 Reijnders, 80.

sions also resonated with another neoliberal concern, namely, the ethics of
capitalism and the "spoilt" consumer citizen. The next section will investi-
gate these concerns in relation to the conception of modern historicity, in
which an open future was prominent. This ethical concern proved to be one
of the main motivators of the WRR report on Dutch industries, and conse-
quently for the formulation of a new planning ideal.

## 5.5 A New Spirit of Capitalism

The Rathenau report had recommended making Dutch society more tech-
nology-minded. Education on the use of technology in middle schools was
intended to mitigate the danger of technological logic determining human
action, but also to foster a spirit of innovation. If the Netherlands was to
keep up with international competition, computer talents had to be stim-
ulated. The latter part of these recommendations has to be read against the
background of a concern for the civic attitude in the crisis of the 1970s. As
the debate between Goudzwaard and Van den Doel has already demonstrat-
ed, the economic debate in the 1970s was also predicated on the ethics of the
citizen (as discussed in section 4.2). Van den Doel had argued that capitalism
had created a new citizen—a critical citizen with preferences for a different,
more ethical, kind of consumption. This also worried neoliberals such as
Daudt and Heertje, who saw that the economic growth of the 1960s had cre-
ated social demands that were not about to go away. They were not so much
against these demands in of themselves, but feared what would happen if
those demands were granted through the state and the public sector. Such a
course of action would not only create an authoritarian state, but it would
also stifle the entrepreneurial spirit of the citizen. In response, they sought
a conduit through which the new emancipatory spirit of social movements
could be channelled away from the state towards the market. As I will argue
in this section, a new understanding of technology as a decentralised net-
work provided just this channel.

In his discussion of the Rathenau report for *Socialism and Democra-
cy*, Den Uyl had noted the strange display of techno-optimism of the Rath-
enau-committee: "Technology is with us. A strange variation on the edge
lettering of the guilder," he joked.[131] This may appear a misjudgement since,

---

131  Den Uyl, "Micro-elektronica als politiek probleem," 121. The Guilder, the old

as noted above, the report contained a clear warning against technologically obsessed thinking. Yet Den Uyl had a point. Whilst the report acknowledged that technology was inherently political, it also presented two distinct ideologies of technology: one of instrumental rationality in line with the critical theory of Illich, and another that stressed the decentralised and creative aspect of technology.[132] Technology led to the disappearance of repetitive work and would lead to "labour that relied on the creativity and sense of responsibility of the employee."[133] Moreover, the report suggested that microelectronics "will lead to the development of decentralised information systems which will give form to a decentralised mode of participation of the employee in the production process."[134] Claims such as these emphasised the decentralised and creative nature of micro-electronics that Den Uyl so vehemently decried—the very same visions of decentralisation that Heertje, Stiphout, and Reijnders so completely embraced.

In an earlier piece, Heertje had already promoted the decentralising effect of technology. He acknowledged that automation would amount to a loss of jobs, but at the same time, that technology would free the worker from the most repetitive labour. This was a mixed blessing that could become an unambiguous blessing if the unemployed could be reintegrated into the job market via re-training. Just as the Rathenau report has asserted, education was the key. The only obstacle was a ridged job market. Hence, Heertje argued, flexibility was absolutely necessary.[135] Such a post-industrial perspective was also promoted by Van Stiphout, who argued that the economic system or order was in a transitional phase that would result in a new form of labour although, similarly, he stressed that this was a mixed blessing.[136] The new form of labour would be more creative, less bound to steady working hours, and less hierarchical, however, in contrast to Heertje, he was more pessimistic about the possibility of reintegrating the newly unemployed. According to Van Stiphout, a new social security system would

---

currency of the Netherlands, had "God is with us" as its edge lettering.

132  Ivan Illich, *Tools for Conviviality* (New York: Harper & Row, 1973); See also: Jan Willem Duyvendak, *De Planning van Ontplooiing, Wetenschap, politiek en de maakbare samenleving*, Nederlandse Cultuur in Europese Context, monografiëen en studies 15 (The Hague: Sdu Uitgevers, 1999), 53–57.

133  De Commissie Rathenau, *Rapport van de Adviesgroep Micro-Elektronica*, 74.

134  De Commissie Rathenau, 74.

135  Heertje, "De Wisselwerking van economische en technologische ontwikkeling."

136  Van Stiphout, "Vernieuwingen in het arbeidsbestel," 377.

have to be established that could deal with the increase of "inactive" workers who could no longer enter the workforce. One of the options he mentioned for such a system, was a basic income.[137] Heertje and Van Stiphout's emphasis on flexibility and creativity imply that the future worker was to develop a different ethos. In that sense, they believed, like Van den Doel, that capitalism would foster a new type of ethics.

The arguments that Heertje and Van Stiphout advanced were a mirror image of the critical theory arguments professed by Mansholt, Illich, and Reijnders. To them, the inherent politics of technology was not one of increased controllability from the centre focussed on productivity and growth, but rather, a politics of decentralised cooperation focussed on creativity and flexibility. However, they shared a key conviction, namely that control over technology by the state or any other central authority was to be distrusted. The image of micro-electronics as a new kind of technology proved here to be crucial. In this vision, computers were transformed from rooms filled with large, bulky machines only able to be operated by government experts, to small chips that could fit in personal desktops to be operated by everyone.[138]

The concerns of Heertje, Van Stiphout and Reijnders were also connected to the issue of democratisation as discussed above. Daudt and Duisenberg had sought to temper the forces of emancipation through political mechanisms of expert bureaucrats and plebiscites, ensuring a steady baseline of policymaking and democratic accountability. Heertje, Van Stiphout, and Reijnders suggested that, if social movements could not reach their goals through parliament, new forms of technology-driven democracy might provide an alternative. For Heertje and Van Stiphout, technology as a driver of economic growth was not only one of the causes of this social change; it was also part of the solution. The quest for emancipation and the further democratisation of society could be canalised by making use of new information technology that could take power away from a centralised government. In

---

137 Van Stiphout, 318; see also: Nic Douben, *Vermogende Arbeid*, Inaugural Lecture (Nijmegen: Tegelen, 1975). On the relation between automation, universal basic income, and neoliberalism, see: Aaron Benanav, *Automation and the Future of Work* (New York: Verso, 2020).

138 Frank Veraart, "De domesticatie van de computer in Nederland 1975—1990," *Studium: Tijdschrift voor Wetenschaps- en Universiteits-geschiedenis|Revue d'Histoire des Sciences et des Universités* 1, no. 2 (June 1, 2008): 145–64; Jouke Turpijn, *80's Dilemma: Politieke Vervreemding Van De Jaren Tachtig* (Amsterdam: Bert Bakker, 2011).

that sense, their analysis was less gloomy than that of Daudt and Stevers. Yet both responses to social change indicate a will to restrain both the state, and government action. Technology had the untapped potential to drive a decentralised form of governance, but it could only actualise that potential if the choices for technology innovation stayed out of the hands of central governments. If the state could be prevented from intervening in technological development, specific tasks of the government could be substituted by technology, slimming down the public sector.

Their acknowledgement of the spirit of emancipation and the role of technological innovation in the *world probematique* formulated by the Club of Rome, show that these neoliberal authors were still experiencing time as accelerating. In 1965, in his inaugural lecture, Koselleck had reacted to the acceleration of time and its revolutionary spirit by calling for the combined use of prognosis and social history to "moderate the historical-philosophical design" of progress.[139] However, Heertje and Stiphout chose a different route, embracing instead the progressive and revolutionary character of accelerating time. Just like the German conservative proponents of technocracy from the 1950s (see section 4.3), they wanted to shield the state from the influence of civil society. Yet, in contrast to their German ordoliberal counterparts, they did not wish to temper the progress of society with its emancipatory demands as such. This same progress had heralded the emergence of micro-electronics and, accelerating the development and use of technology, held the promise of actualising the emancipatory ethos of the 1960s. However, the state could not be part of the accelerating stream of history. State and civil society should be separated again, especially after the lines between the two had become increasingly blurred under the social planning ideal. The means to achieve this end was, once again, planning. More specifically, the mid-term forecasts of neoclassical growth models, such as the VINTAF model produced by the CPB, formed a promising means for reinstating the separation between the state and society.

As with the pleas for an independent budget norm, growth models appeared to be the means to plan technological innovation without too much government control over technology. In other words, they provided the means by which to prevent the state from controlling technology. This aim

139  Reinhart Koselleck, "Modernity and the Planes of Historicity," in *Futures Past: On the Semantics of Historical Time*, trans. Keith Tribe (New York: Columbia University Press, 2004), 23.

was most clearly formulated in *The Place and Future of Dutch Industries* by the WRR, which was published six months after the Rathenau report.[140] As mentioned previously, the hidden agenda of the WRR report was to overcome ideological opposition in economic policy. To that end, the report contained a lengthy comparison of the different forms of planning—from more to less interventionist. Labour union economists as well as the CPB were invited to present their planning models as possible alternatives. The conclusion claimed to embrace both the unions' and the CPB's planning ideals but, reading between the lines, endorsed a minimally interventionist model.[141] According to the report, the reason why a top-down model of government intervention would not work was that the industry, technology, and the decision-making structures surrounding them were too complex for the state to handle and to attempt to do so would result in "incoherence in the aims and a shifting around of the social costs [*afwenteling*]"—precisely the criticism that Stevers and Van den Doel had levelled against the corporatist system of decision making.[142]

The keywords for this new planning programme were "anticipating" and "creating conditions" for the government management of industries. Only if the industry was in a sufficiently dire state, determined by a set of minimal conditions, was the government allowed to intervene. The task of planning was hence not the intervention itself, but rather to determine the conditions upon which the government was to act, and to predict when these would occur. Planning thus functioned as a mechanism restraining the state by setting minimum requirements.[143] Government intervention had to become the exception, preventing ad-hoc interventions as Stevers had warned.

Instead of intervening, the government had to create the right conditions for the development of specific sectors of industry. The aims of these conditions echoed those described by Heertje and Van Stiphout in relation to technology, namely, innovation, creativity, and flexibility: "Great flexibility to respond to new insights and on specific circumstances";[144] creativity to

---

140 Wetenschappelijke Raad voor Regeringsbeleid WRR, *Plaats en toekomst van de Nederlandse industrie*, Rapporten aan de Regering 18 (The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1980).

141 WRR, 166.

142 WRR, 288.

143 WRR, 161.

144 WRR, 250.

"tap into new emerging markets";[145] and "innovation in science and industries" to keep up with the international competition.[146] To this end, planning was given the further task of designing the framework of the base-line industrial policy in the mid-term so the private sector could act accordingly. This seemed similar to the planning ideal propagated by Jan Tinbergen in the 1950s, in which planning was to provide a framework via which the actions of the private sector could form a stable pattern (see section 3.8). In contrast to Tinbergen's mid-century theories, however, industries were no longer naturally expected to develop towards a dynamic equilibrium. The development of capitalism had brought industries to a point where they had become stale, unable to innovate any further. Instead, the framework the WRR proposed had to be one capable of re-invigorating industries that were, from an international perspective, lagging behind and, in doing so, stimulate the national potential to be innovative, which might otherwise be lacking.[147]

Emphasising the national potential for innovation, the WRR was not only writing a recommendation to the government, it was also an appeal to the nation for a new attitude. If Dutch industries were to accommodate new global circumstances, they had to change radically and "such a radical change has to proceed in a stable manner for the sake of public support. Achieving an optimistic psychological climate can be highly dependent on the future perspectives that the government is able to open up."[148] That is to say, the government was dependent on prognosis and planning to open up a vision of the future that could stimulate the imagination of the individual citizen to change his or her economic and political attitude. It was a line of argumentation clearly inspired by the futurist arguments of the 1960s. The horizon of progress was no longer a given. Instead, new mentalities had to be fostered through new visions of the future. In interviews around the time of the report's publication, this message was hammered home by its chief author, the economist Arie van der Zwan. A "new climate had to be established"—a climate of "fresh minds" who dared to take risks, undoing the pessimistic industrial climate. Like Goudzwaard and Van den Doel, Van der Zwan was summoning the spirit of capitalism—the spirit of entrepreneurship and innovation—in order to safeguard the future of Dutch industry.

---

145 WRR, 101.
146 WRR, 33.
147 WRR, 161.
148 WRR, 288–89.

Like all economists in the 1970s, Van der Zwan understood that he was living in a time of crisis. For him, this was the crisis of the capitalist spirit. In a WRR meeting to discuss the report's development, he claimed that "in a time of crisis, planning is more popular than in a time in which citizens dutiful follow the spirit of their times."[149] The crisis created a new moment for intervention; for society to radically alter their psychological mindset. When people became aware that they were in a state of crisis, it was the government's task to provide future prospectives and to help society take the next step. Contrary to Goudzwaard and Van den Doel, it was clear that Van der Zwan did not wish to depart from the spirit of capitalism. Rather, he wished to renew it with the values that were fostered by the socio-technical imaginary of micro-electronics: creativity, innovation, and flexibility.[150]

Like many other government advisory committees who have an inbred drive to proliferate themselves, the WRR advised installing another committee on this new industrialisation of the Netherlands—a committee of scientific experts and bureaucrats one step removed from democratic parliamentary decision making, able to guide Dutch society through its moment of crisis.[151] However, success also hinged on the ability of innovation experts within the various sectors of industry to make adequate decisions. These were not government-bound experts, but had to be private experts on technology.[152] To this end, the report recommended collaboration between industry and the universities to create hubs for research and development in the service of industrial innovation.[153] In that sense, the WRR report was instrumental in inaugurating a neoliberal conception of knowledge valorisation in which business instead of the government would be the main financers of academic research.[154] It also anticipated the rise of a private industry

---

149 Cited in: Varisli, "Genzen aan de Groei?," 1–2.

150 Internationally, this idea was also propagated by Daniel Bell, see: Daniel Bell, *The Coming of Post-Industrial Society: A Venture in Social Forecasting* (New York: Basic Books, 1976); see also: Jenny Andersson, "Prediction and Social Choice: Daniel Bell and Future Research," in *The Decisionist Imagination: Sovereignty, Social Science, and Democracy in the 20th Century*, ed. Daniel Bessner and Nicolas Guilhot (New York: Berghahn Books, 2019), 250–71.

151 WRR, *Nederlandse industrie*, 291.

152 The Dutch history of the privatisation of technology and future expertise is described in: Rein de Wilde, *De voorspellers: een kritiek op de toekomstindustry* (Amsterdam: Uitgeverij De Balie, 2000), chaps. 7 & 8.

153 WRR, *Nederlandse industrie*, 208.

154 Philip Mirowski and Esther-Mirjam Sent, "The Commercialization of Science, and the Response of STS," in *The Handbook of Science and Technology Studies*, ed.

of experts in the future who would advise industries on a scientific basis.[155] Although Van der Zwan appealed, first and foremost, to the government to provide society with future visions, this task could just as well be executed by privately owned businesses.

Ultimately, the WRR report acknowledged that the mid-term forecasts of the neoclassical growth models—also those of the CPB—still lacked a satisfactory way to connect inflation to the wages in the public sector, making a simple independent budget norm, such as that wished for by Stevers and Rutten, impossible.[156] In addition, the neoliberal wish for the restriction of the public sector was still not realised. In literature on the CPB and neoliberalism, it is sometimes suggested that the VINTAF models are singlehandedly responsible for the neoliberal turn in Dutch economic policy.[157] However, the reality was more ambiguous. Due to their Keynesian underpinnings, neoclassical growth models often did not live up to neoliberal expectations.[158] In that sense the new planning ideal remained very much an ideal. The imaginary of the VINTAF-models, however, were crucial to the development of this new planning ideal. The growth models showed great potential in setting the limits for government intervention. Moreover, the focus of planning was the creation of the right conditions in industry for innovation and growth. In other words, planning became market-focussed. It was no longer the primary task of planning to restrict or manage the market where necessary, but rather to stimulate those markets instead.

## Conclusion

Timothy Mitchell has argued that the invention of the economy as a measurable and manageable object after the Second World War "converted the

---

Edward Hackett et al. (Cambridge, MA: MIT Press, 2007), 635–89.

155 Jorrit Smit, "Utility Spots: Science Policy, Knowledge Transfer and the Politics of Proximity," PhD thesis (Leiden University, 2021), 154.

156 WRR, *Nederlandse industrie*, 272.

157 For example: Van Zanden, *The Economic History of The Netherlands*, 170; Uwe Becker and Corina Hendriks, "'As the Central Planning Bureau Says': The Dutch Wage Restraint Paradigm, Its Sustaining Epistemic Community and Its Relevance for Comparative Research," *Review of International Political Economy* 15, no. 5 (December 2008): 826–50, https://doi.org/10.1080/09692290802403486.

158 Elsewhere, I have made this point extensively, see: Kayzel, "Politics of Restraint."

accelerating growth of modernity into an apparently stable future."[159] The macroeconomics that made the economy measurable and the Keynesian policies that made it manageable created a seemingly stable order characterised by accelerating economic growth and consensus-driven politics. Mitchell references here Koselleck's distinction between a temporal experience defined by a stable future associated with the early modern period on the one hand, and an experience of acceleration determined by an unsure future emerging in the 18th century on the other. In the post-war order, it seemed this distinction no longer held, Mitchell argues, as the managed economy brought both acceleration *and* a stable future.

Although accelerated economic growth had already become a horizon of expectation in the growth models of the 1950s, like those of Robert Solow,[160] the experience of time as accelerating only emerged at the end of the 1960s, giving way to a horizon of expectation in which the economy was inherently unstable. Rather than taking Mitchell's description as an analysis of the experience of the 1950s, I would propose that it more resembles a utopian vision of the future in the 1970s. As I have argued in this chapter, Dutch neoliberal authors in the 1970s sought ways in which the acceleration of time with its revolutionary potential could be conceived in parallel with a stable expectation of the future. As in Mitchell's description, the image for such stable acceleration was given in neoclassical growth modelling. If the emancipatory social forces could be channelled in the market through decentralised technological systems, the state could remain stable in the long term, ensuring a revolutionary transformation of society, but without the danger of the state repressing the individual freedoms of citizens and free markets. The state could be made stable by restricting it, making sure that it would not bend to the demands of civil society. Growth models might provide this means of restraining the state, binding government policies to the mid-term forecasts of the models.

This vision for the future entailed a new decisionist imaginary. The state and civil society had to be separated after the distinction between the two had become increasingly blurred in the social planning ideal of the 1960s.

---

159  Timothy Mitchell, "Economentality: How the Future Entered Government," *Critical Inquiry* 40, no. 2 (2014): 497.
160  Verena Halsmayer and Kevin D. Hoover, "Solow's Harrod: Transforming Macroeconomic Dynamics into a Model of Long-Run Growth," *The European Journal of the History of Economic Thought* 23, no. 4 (January 2015): 561–96, https://doi.org/10.1080/09672567.2014.1001763.

Civil society and the state answered to different regimes of historicity, with the state standing outside of the turmoil of historical development. The possibility of democratic decision making on the central state level had to be restricted, leaving policymaking as much as possible in the hands of expert bureaucrats who could operate independently of the influence of parliament. These bureaucrats were monitored by the public and, if necessary, plebiscites could intervene in the policymaking process. For the demands of emancipation and democratisation, these had to be realised outside of the state. To that end, a new privatised form of expertise emerged. Future research thus also became the concern of privately owned consultancy firms.

As I will show in the next chapter, the WRR's *Place and Future of the Dutch Industries* contained a number of neoliberal proposals that would only become a reality in the 1990s. The report contained ideas of delegating state tasks to lower levels of government and the private sector with the idea that long-term strategies of the state provided sufficient guidance for semi-private actors to perform public tasks.[161] However, when this idea was transformed into concrete policy, something fundamental had changed. The distinction between state and civil society, so cherished by neoliberal authors in the 1970s, again started to blur. Remarkably, the whole imaginary of the state as such seemed to disappear in the 1990s, leaving only the long-term prognoses of the planning bureaus.

161 WRR, *Nederlandse industrie*, 161.

# Chapter 6.
# Disseminated Neoliberalism:
## Visions of a Diffuse Society, 1980—1999

*How things can change. It was only ten years ago that innumerable political and policy articles were struggling with a barbaric jargon suggesting that even setting up playgroups and school support would help to overthrow the chaotic late-capitalist order. But nowadays people speak in the happy language of the management consultant, about how the state apparatus could be reorganised like it is the office layout of a young and ambitious insurance firm.*

—Jacques van Doorn, *Corporatism and Technocracy* (1981)[1]

*All those fringe groups who call for a new form of solidarity (coming together, one with nature, through a guru or God). We consider them as comical elements, keeping our televisions shows a bit lively. We have our houses, our cars, our incomes, our partners, our children: four million miniature paradises. And the moment someone only slightly meddles with our little heaven we call upon our interest groups.*

—Piet Thoenes in an op-ed for *De Volkskrant* (1981)[2]

## *Introduction*

From the 1980s onwards, the whole imaginary of the state was going out of fashion.

Terms such as 'governance', 'institutional capacity', 'networks', 'complexi-

---

1 Jacques Van Doorn, "Corporatisme en technocratie," *Beleid en Maatschappij* 8, no. 5 (1981): 134.
2 Piet Thoenes, "Verzorgingsstaat kan best behouden blijven," *De Volkskrant*, May 15, 1981.

ty', 'trust', 'deliberation' and 'interdependence' dominate the debate, while terms such as 'the state', 'government', 'power' and 'authority', 'loyalty', 'sovereignty', 'participation' and 'interest groups' have lost their grip on the analytical imagination…[3]

So concluded the two Dutch public administration scholars, Maarten Hajer and Hendrik Wagenaar, at the start of the 21st century. Sifting out the latest trends of network and risk societies, they tried to spell out what these sociological macro-concepts implied for the practice of policy analysis. The state and parliament lost their position as the prime actors of policymaking. Instead, a variety of new sites and actors were involved. The trust of citizens in scientific expertise was no longer a given, and stable scientific institutions nowhere to be found. Rather, the issues of the turn of the century that policymakers had to face appeared as "too complicated, too contested and too unstable to allow for schematic, centralized regulation."[4]

The proclaimed decentralisation of policymaking raised the question of whether central planning was even still possible. The task of the CPB had been, from its very inception, to frame the central decisions of the government in relation to the development of the economy and how, through the use scenario forecasting, uncertainties could be managed. For sociologists and public administration scholars writing at the end of the 20th century, this structure became associated with a "classical-modernist" picture of science and policy, typical of the stable order of post-Second World War welfare states.[5] However, the arrival of a radical new *horizon of expectation* at the end of the 1960s had broken open this "classical-modernist" picture. Hajer and Wagenaar argued that globalisation, the rapid development of (communication) technology, and new complex, international problems such as climate change "created a widespread awareness of the ubiquity of the unintended, perverse consequences of largescale rationalized planning and the limits to centralized, hierarchical regulation as the dominant mode of collective prob-

---

3 Maarten Hajer and Hendrik Wagenaar, "Introduction," in *Deliberate Policy Analysis: Understanding Governance in the Network Society*, ed. Maarten Hajer and Hendrik Wagenaar (Cambridge, UK: Cambridge University Press, 2003), 1.
4 Hajer and Wagenaar, 7.
5 Ulrich Beck, Anthony Giddens, and Scott Lash, *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order* (Cambridge, UK: Polity, 1994); Maarten Hajer, "Policy Without Polity? Policy Analysis and the Institutional Void," *Policy Sciences* 36, no. 2 (June 2003): 175–95.

lem-solving."[6]

As such, scholars started to conceptualise scientific expertise in new ways. Scientists were no longer expected to present solid, commensurable, and stylised facts. Rather, they were expected to deal with unstable, complex knowledge fraught with uncertainty. Universities, public planning, and statistics bureaus lost their self-evident status as producers of public knowledge, as everyone potentially had experiences and information relevant for policymaking.[7] Out of the blue, the polity had millions of small producers of expert opinion.[8] Moreover, political issues were ticklish, full of twists and turns; unseen factors and actors could suddenly become crucial midway through the solution-finding process, like a dramatic plot twist in a book. A paradigmatic example was the AIDS epidemic in the United States of the 1980s, wherein the absence of adequate state measures led HIV and AIDS patients to self-medicate with untested medicine, thus dissolving the lay-expert divide in the process.[9] In such cases, high levels of uncertainty and substantial unknowns were combined with the immediate need for political action. One could not trust the state to "get the facts straight" in preparation for political deliberation. Instead, facts were uncovered by and through political action—not primarily by government institution, but rather, by civilians.

This conceptual change of scientific expertise was part of a larger shift in the political vocabulary that took place in the 1990s. Governance was now placed above state intervention, human rights above state protection, citizenship above the mobilisation of mass movements.[10] It is tempting to assume that this conceptual shift was the result of the diminished trust in planning administrations, or the diminishing influence of national govern-

---

6  Hajer and Wagenaar, "Introduction," 10.

7  For instance: Michel Callon, Pierre Lascoumes, and Yannick Barthe, *Acting in an Uncertain World: An Essay on Technical Democracy*, trans. Graham Burchell (Cambridge, MA: The MIT Press, 2011).

8  Gerard de Vries, "What Is Political in Sub-Politics?: How Aristotle Might Help STS," *Social Studies of Science* 37, no. 5 (October 2007): 782.

9  For example, see: Steven Epstein, "The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials," *Science, Technology, & Human Values* 20, no. 4 (Autumn 1995): 408–37.

10  Samuel Moyn, *The Last Utopia: Human Rights in History* (Cambridge, MA: Harvard University Press, 2012), 176–80; Peter Mair, *Ruling the Void: The Hollowing of Western Democracy* (New York: Verso, 2013), 100–103; Jessica Whyte, *The Morals of the Market: Human Rights and the Rise of Neoliberalism* (New York: Verso, 2019), 201–6.

ments in a world of globalisation.[11] However, such an assessment foregoes the political and ideological role this change in vocabulary played. Diverting attention away from notions of the state, government decision making and central regulation often served neoliberal policies of deregulation and privatisation.[12] Moreover, as I will argue in this chapter, the importance of national planning agencies did not really diminish. Rather, they simply became less visible.

In this chapter, I will advance two interconnected arguments. One concerning the emergence of a new political vocabulary of diffuse expertise and one on how planning related to the functioning of that vocabulary. My first is that ideas on diffuse expertise and decision making first appeared in response to (or indeed, were a continuation of) discussions that took place in the 1980s on the relation between the state and civil society. The psychological rebirth of the spirit of citizenship (and/or capitalism) that Hans van den Doel and Arie van der Zwan had hoped for (discussed in the previous chapter) did not come to fruition at the start of the 1980s—leaving a void in the political imaginary. As I will argue in the first two sections, the result of this void was that the capacity of the state became severely questioned and issues of meaningful collective political action became ever more poignant, forcing a self-evaluation of the main political currents and ideologies—something equally true for the social and Christian democrats, and even for neoliberalism. These classic post-war Western European political movements, each in their turn, attempted to reposition their ideological anchors forgoing reference to the state or a uniform collective. The Christian democrats, for instance, developed the new ideal of the civil society (*maatschappelijk middenveld,* in Dutch) as an alternative to older notions of both state and soci-

---

11  For example, see: F. R. Ankersmit, "Political Representation and Political Experience: An Essay on Political Psychology," *Redescriptions: Political Thought, Conceptual History and Feminist Theory* 11, no. 1 (January 1, 2007): 38, https://doi.org/10.7227/R.11.1.3.

12  For example, see: Daniel T. Rodgers, *Age of Fracture* (Cambridge, MA: Harvard University Press, 2011), chap. 2; David Williams and Tom Young, "Governance, the World Bank and Liberal Theory," *Political Studies* 42, no. 1 (March 1, 1994): 84–100, https://doi.org/10.1111/j.1467-9248.1994.tb01675.x. For this critique on Science and Technology Studies specifically, see: Philip Mirowski and Edward Nik-Khah, "Markets Made Flesh: Performativity, and a Problem in Science Studies, Augmented with Consideration of the FCC Auctions," in *Do Economist Make Markets: On the Performativity of Economics*, ed. Donald MacKenzie, Muniesa, Fabian, and Lucia Siu (Princeton, NJ: Princeton University Press, 2007), 190–224.

ety.[13] The social democrats, as I argue in section three, imagined their own "politics beyond the state", arguing for a third sphere of private initiative without profit motive fostered on local community ties.[14]

This soul searching spurred a wider embrace of neoliberal ideas across the political spectrum. In the Netherlands, this resulted in a series of quick and successful neoliberal reforms in the 1990s. In a relatively short time span of eight years, state-owned industries were privatised, market incentives introduced in public health and social services, and New Public Management implemented in many government organisations.[15] It is often assumed that the neoliberal policies of the 1990s were simply the application of the neoliberal ideas that were developed towards the end of the 1970s.[16] However, such a narrative overlooks the crucial differences between the two decades and neglects the specific discursive context of the implementation of neoliberalism. Several authors have pointed out that neoliberalism did not flourish purely on its own merit in the 1990s. Only cross-pollination with ideas from social democracy and Christian democracy produced a strong enough neoliberalist programme to take root in the Dutch public administration.[17]

---

13 For the development of this type of Christian democratic thinking and its interaction with neoliberalism, see: Merijn Oudenampsen, "The Conservative Embrace of Progressive Values: On the Intellectual Origins of the Swing to the Right in Dutch Politics" (Tilburg, Tilburg University, 2018), 119–41; Merijn Oudenampsen, "The Responsible Society: On Christian Democracy and Neoliberalism" (Paper presented at the Building the neoliberal welfare state Workshop, University of Amsterdam, 28 June 2019); Margo Trappenburg, "Hoe Elco Brinkman alsnog zijn zin kreeg: neoliberalisme, communitarisme en linkse idealen in de Nederlandse gezondheidszorg," *Sociologie* 15, no. 3 (2019): 289–307, https://doi.org/10.5117/soc2019.3.004.trap. For a similar discussion within the Dutch neoliberal context, see: Jos de Beus, "Economisch Burgerschap: een ideaal zonder beweging," in *De Staat van de Burger: Beschouwingen over Hedendaags Burgerschap*, Beleid en Maatschappij Jaarboek 1991 (Amsterdam: Boom uitgevers, 1992), 121–43; cf. Jan Willem Duyvendak and Ido de Haan, "Review van: J. de Beus, Markt, Democratie En Vrijheid En A. Kinneging, Liberalisme. Een Speurtocht Naar de Filosofische Grondslagen," *Krisis: Tijdschrift Voor Actuele Filosofie* 40, no. 3 (1990): 80–88. The analogous development in social democratic thinking will be discussed below.

14 As I will argue below, the idea of "politics beyond the state" came from the French philosopher Pierre Rosanvallon.

15 Bart Stellinga, *Dertig jaar privatisering, verzelfstandiging en marktwerking*, WRR Webpublicaties 65 (Amsterdam: Amsterdam University Press, 2012).

16 Such a narrative can, for example, be found in: Hans Achterhuis, *De utopie van de vrije markt* (Rotterdam: Lemniscaat, 2010); Herman Tjeenk Willink, *Groter Denken, Kleiner Doen: Een Oproep* (Amsterdam: Prometheus, 2019).

17 In an international context, this argument has been recently quite forcefully made by Stephanie L. Mudge, *Leftism Reinvented: Western Parties from Socialism to Neolib-*

This hybridisation could happen because neoliberalism, social democracy, and Christian democracy were all grappling with the defunct belief in the capacities of the state and political collectives. As they were all forced to deconstruct their ideological walls, ideas of "citizenship", "private initiative," and "locality" migrated more easily between them.

To fully illustrate the above, I will discuss authors associated with the Dutch Labour Party—continuing the Labour-focussed narrative of the previous chapter. In addition, I will look at French philosopher-historians associated with the *Parti socialiste* (PS). As I will show, the Dutch discussion imported some its central notions from French discourse. Political thinkers such as François Furet, Claude Lefort, and Pierre Rosanvallon introduced ideas of "politics beyond the state" and the notion of "citizenship" as a new volatile ad-hoc manner of forming political collectives, all of which were to have a lasting influence in the Netherlands. Moreover, the French discussion provides a measured comparative case for the Dutch developments.[18]

Following the methodology of conceptual history (*begriffsgeschichte*) fashion, the quick change in political concepts, of which the shifting vocabulary of public administration scholars and the swift rise of notions of "citizenship" and "governance" in the political arena are part, can be understood as the product of an altered experience of time. This chapter charts this shift in experience and argues that it emerged from fatigue of the crisis narratives of the 1970s (discussed in the first section), morphing from the mid-1980s to the early 1990s into an experience of *presentism*, to use François Hartog's controversial term (central to section seven).[19]

---

*eralism* (Cambridge, MA: Harvard University Press, 2018); Melinda Cooper, *Family Values: Between Neoliberalism and the New Social Conservatism* (New York: Zone Books, 2017). For a similar point in the Dutch context, see: Jan Willem Duyvendak and Ido De Haan, eds., *Maakbaarheid. Liberale Wortels En Hedendaagse Kritiek van de Maakbare Samenleving* (Amsterdam: Amsterdam university press, 1997).

18  Due to space limitations, this chapter will forego other international discussions that also had a large impact on Labour Party discourse in the Netherlands, such as the notion of *reflexive modernity* in the third way of British social democracy. I suggest a similar analysis of how social democrats were looking beyond the state for new forms of solidarity applies to those developments as well. See: Anthony Giddens, "'Brave New World: The New Context of Politics," in *Reinventing the Left*, ed. David Miliband (Cambridge, UK: Polity, 1994); Michael Rustin, "The Future of Post-Socialism," *Radical Philosophy* 74 (December 1995): 17–26; Alex Callinicos, "Social Theory Put to the Test of Practice: Pierre Bourdieu and Anthony Giddens," *New Left Review*, no. I/236 (August 1, 1999): 77–102.

19  François Hartog, *Regimes of Historicity: Presentism and Experiences of Time* (New York: Columbia University Press, 2015).

This new experience of time also relates to the second argument I wish to make in this chapter, namely that central planning agencies were instrumental in the functioning of the new political vocabulary described above. A continuation of the futurist discourse of the 1960s, it was thought that policymaking was faced with an open, uncertain, complex, and contingent future in the 1990s. Simultaneously, however, new overarching and inescapable images of the future emerged: those of globalisation, liberalism, and free markets. In this dual conception of historicity, nation states lost their capacity to steer the future beyond the image of globalisation. In a departure from previous planning ideals (discussed in the previous two chapters), states were no longer expected to provide new images of the future. Instead, this task fell completely to individual citizens. Yet the problem of the gap between the space of experience and the horizon of expectation (as explained in the fourth chapter) remained: How could the political actions of the individual be related to events in the future? Once again, planning was vital in bridging this gap.

In the Netherlands of the early 1990s, a new planning ideal arose, which I will call *regulatory planning*. Although the initiative for policymaking was given—in theory at least—to individual citizens, governments still had the task of providing a stable choice framework that would allow individuals to make their own assessments of uncertainty. Moreover, this choice framework could *nudge* individuals into making more rational choices, in the long term working towards a "bright new future" of globalisation.

As with the previous planning ideal of restraint (see previous chapter), the CPB was no longer the leading actor in the conceptualisation of regulatory planning. In order to track its emergence in Dutch politics, the latter half of this chapter will research different planning agencies, specifically those concerned with environmental policies. Having ripped open the future in the 1960s, the shadow of future climate disaster still loomed large in the political imagination in the second half of the 1980s (and continues to do so). Therefore, as a case study, this chapter investigates the drafting of environmental policies within the Ministry of Public Housing, Spatial Planning, and Environment (*Volkshuisvesting, Ruimtelijke Ordening en Milieu*, VROM) in the late 1980s and early 1990s—the so-called National Environmental Policy Plan (*Nationaal Milieubeleidsplan*, NMP). Analysing in detail a conflict between VROM and the Ministry of Economic Affairs over the interpretation of *sustainable development*, I will show how problems with the

older planning ideal forced VROM to adopt a regulatory planning ideal for the successors of the NMP.

This chapter will proceed in a more or less chronological fashion, starting with crisis fatigue and a discussion on the state in the Netherlands in the 1980s. In the third section, similar debates from France are discussed. The fourth section moves to the early 1990s and analyses debates on citizenship in relation to regulatory planning. How these discourses affected concrete planning practices is discussed in sections five and six, whilst the final section will attempt to understand regulatory planning in relation to conceptions of historicity.

## 6.1 No Need for Future Perspectives

What happens when a prophecy anticipating the end of times fails to come true? Is the prophet denounced with everyone returning to their daily lives as if nothing had happened? Or does the end-time continue without the promise of salvation? This is what it might have felt like when the 1970s crisis of the political and economic order started to wane but the problems of (the global) economic order, international relations, the environment, and Cold War tensions continued into the 1980s. Historians have painted the 1980s as a decade of new pragmatism that overcame the ideological clashes of the preceding decade.[20] However, to many this pragmatism was everything but hopeful as ideological struggles continued until the middle of the decade with labour strikes and mass demonstrations. Socialists saw this as a continuation of the crisis of capitalism—governments were simply "buying time" (to use a notion by Wolfgang Streeck) and merely postponing the inevitable.[21]

How was time experienced after a crisis that had passed its crucial moment? In 1980, the Dutch satirical TV duo Kees van Kooten and Wim de Bie complained about the rise of gloomy perspectives in the newspapers of that

20 For example, see: Göran Therborn et al., "The 1970s and 1980s as a Turning Point in European History?," *Journal of Modern European History* 9, no. 1 (April 2011): 8–26, https://doi.org/10.17104/1611-8944_2011_1_8; Manu Goswami et al., "AHR Conversation. History after the End of History: Reconceptualizing the Twentieth Century," *American Historical Review* 121, no. 5 (December 2016): 1567–1607, https://doi.org/10.1093/ahr/121.5.1567.
21 Wolfgang Streeck, *Buying Time: The Delayed Crisis of Democratic Capitalism*, trans. Patrick Camiller and David Fernbach (New York: Verso, 2014).

year, calling it "doom-thinking":

> We're leaving because we can't take it anymore. Because we can't take the strangling suffocating *doom-thinking*. We can't take all the columns, criticisms, warnings in the newspapers constantly proclaiming that the total catastrophe is upon us. Emerging in the Netherlands is an absurd, insufferable mood of ruin. […] What is the purpose of these statements? A wake-up call? But we were already awake! Do we have to vote progressively in 1981? We always did that! Do we have to take more energy-saving measures? Drinking one beer less whilst wearing two sweaters? […] What kind of warnings are these? What kind of punishment is this? Who will provide a sensible perspective? The politicians? They talk nothing but nonsense! The doctors? They've become sleeping pill dealers! The spiritual leaders? The average minister is still struggling with the 1960s, whilst Amsterdam is falling apart.[22]

Kooten and De Bie were attacking the predominance of doom perspectives in the media that provided no prospect for meaningful political action. These images did not provide a story of history in which the destruction of society could still be averted. Moreover, to them, it was unclear who was going to provide alternative visions of the future. Being satirical, Kooten and De Bie's take contained much exaggeration, yet their assessment of doom-thinking denoted a very real experience, and doom-thinking would go on to become one of the defining notions of the 1980s.[23] Kooten and De Bie's use of doom-thinking referenced a profound fatigue of all the crisis narratives that had dominated the 1970s. Such fatigue, they warned, would result in apathy towards the future, an unwillingness to act, and an impoverishment of imagination. Continuing, they remarked:

> With no other outlook to offer other than complete downfall, people will start to commit suicide. And you can already see them looming on the horizon, the hordes of suicide experts [*suicidogogues*]. Because in the

---

22 Kees van Kooten and Wim de Bie, "Episode 8: Emigreren Naar Nieuw Zeeland," *Op Hun Pik Getrapt* (VPRO, March 2, 1980).
23 Doom-thinking was very akin to the "No Future" slogan of The Sex Pistols and has similar cultural connotations. For an analysis similar to mine of the connection between "No Future" and the experience of historical time, see: Tobias Becker, "Rückkehr der Geschichte? Die »Nostalgie-Welle« in den 1970er und 1980er Jahren," in *Zeitenwandel: Transformationen Geschichtlicher Zeitlichkeit Nach Dem Boom*, ed. Fernando Esposito (Göttingen: Vandenhoeck & Ruprecht, 2017), 93–117.

Netherlands everything has to happen under the proper guidance. We don't know better, even killing ourselves is officially assisted. That or a do-it-yourself-hype, complete with cyanide-parties.[24]

Apart from satirising newspaper reporting, Kooten and De Bie were pointing out the irony that pictures of a chaotic future had arisen at a moment in history when society had never seemed more organised. Social planning had wanted to order every aspect of society, yet the only thing the Dutch bourgeoisie could dream about were visions of a society in disarray. Even when their gloomy nightmares drove people to suicide, such action had to be properly administered. The ultimate joke was that suicide, the most personal and drastic choice a person could make, was framed as to be planned by the government as well. The bourgeoisie had become so spoilt and, consequently, so passive, that even the last decisive act that remained for a person with no other prospects had to be done by the state.

Mocking the spoilt citizen, Kooten and De Bie's satire invoked a critique of public services that was growing in popularity at the time.[25] The most prominent and radical articulation of this critique was Hans Achterhuis' *The Market of Wellbeing and Happiness* (1979), which attacked public services and social workers for excessive bureaucratisation and professionalisation.[26] These tendencies, he argued, had turned social work into a cold and detached practice, governed by a disproportionate number of rules, precisely in a line of work that had to revolve around individual contacts and personal help. Achterhuis relied on the critical theory of Ivan Illich to spell out the consequences of this form of social work, turning all citizens into patients, no longer able to act on their own volition, but passively awaiting administration.[27] The subtitle of Achterhuis' book, *A Critique of Andragogy*, referenced the study programme at the University of Amsterdam in which he had

---

24 Van Kooten and De Bie, "Episode 8: Emigreren Naar Nieuw Zeeland."

25 Such a critique already started in the mid-1970s with Bram Peper's dissertation *The Formation of Wellbeing Policy* (1974) and Herman Vuysje's *The New Leisure Class* (De nieuwe vrijgestelde, 1977). See: Jan Willem Duyvendak, *De Planning van Ontplooiing: Wetenschap, politiek en de maakbare samenleving*, Nederlandse Cultuur in Europese Context, monografiëen en studies 15 (The Hague: Sdu Uitgevers, 1999), 60–61.

26 Hans Achterhuis, *De markt van welzijn en geluk* (Amsterdam: Uitgeverij Ambo, 1979).

27 Ivan Illich, *Deschooling Society* (New York: Harper & Row, 1971); Ivan Illich, *Medical Nemesis* (New York: Pantheon Books, 1975).

been an assistant professor of philosophy for several years. Andragogy (the study of adult education)—understood at the time to constitute the scientific foundation for social work practice—was a typical product of the social planning ideals of the 1960s.[28] Kooten and De Bie's satirical name *suicidogogues*—for a type of social worker that assisted in suicide—similarly mocked this study programme (both notions take their root from the Ancient Greek *agōgos*, meaning leader). Achterhuis' critique, and by extension, Kooten and De Bie's satirical take on social services, was thus clearly also an attack on social planning.

Achterhuis' core argument was that social services had started to operate as a market. Echoing earlier neoliberal and social democratic concerns (see previous chapter), Achterhuis argued that market exchange would not serve needs, but rather create artificial preferences for more goods, and that social workers did the same thing. From this perspective, public services such as education, medical care, and care for the elderly did not necessarily cater to any pre-existing demand, but instead created its own artificial demand. Moreover, the bureaucratic, state-oriented manner in which public services were organised established a symbolic order propagating a singular and narrow vision of what good care was, whilst marginalising alternatives. How health and social services were offered, contested Achterhuis, was therefore more akin to choosing from a restaurant menu. This instilled an image of caring as a form of consumption, whilst the image of care as rooted in local inter-personal contact was simply discarded. In the language of Herbert Marcuse—also referenced by Achterhuis—the public sector made the citizen one-dimensional, a being devoid of imagination, only able to choose what the public services had to offer.[29] In this understanding, the citizen was little more than a passive consumer.

However, future-fatigue and political passivity were not only caused by social services. Violent clashes between activists and the police, and the at best marginal impact of mass demonstration also questioned the meaningfulness of political action. As pointed out by the philosopher René Boomkens in his critical review of Achterhuis' work at the time, *The Market of Wellbeing and Happiness* was implicitly reacting to left-wing discussions about the appro-

---

28  Duyvendak, *De Planning van Ontplooiing*, 59–68.
29  Achterhuis, *De markt van welzijn en geluk*, 139; Herbert Marcuse, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (Boston, MA: Beacon Press, 1964).

priate way to achieve their aims. Political parties on the Left were once again exploring the possibilities of a thoroughgoing collaboration hoping to form a left-wing cabinet after the next election. As Boomkens remarks, all parties, even the more radical ones, had by that time (some) experience in (local) government: "[W]orking for the government apparatus, in other words, has become a daily practice for party-activists on the Left."[30] Boomkens meant that the Left was very eager to achieve its goals through parliament and state apparatus. However, at the same time, the period was characterised by

> continued fights between the riot-police and the state apparatus on the one hand and squatters, anti-nuclear activist, radical anti-militarist, punks, etc. on the other. The state apparatus and political activist are here diametrically opposed in a physical clash. No political nuances, the motto is: survival, preferably as autonomous as possible.[31]

In 1980, protests against the housing shortage during the inauguration ceremony of Queen Beatrix in Amsterdam had resulted in violent clashes between radical leftist activist and the riot police. A month earlier, the Amsterdam police had even employed tanks to wipe clean the squatted buildings in the Vondelstraat.[32] The government was shocked about the willingness of the activists and squatters to use violence. The feelings were mutual, as many activists were shocked by the state's violence. The squatter Rene Roemersma said in an interview that the Vondelstraat riots formed a turning point: "[F] or many, it was a moment of disillusion. Some of us stopped [their activist lives], others, like myself radicalised. They thought 'if this is the real face of the state, well come and get us.'"[33]

Yet disillusionment with the state was not only fostered by violent clashes with activists. On the 29th of October 1983, the largest political rally in Dutch history was held in The Hague. With half a million people in attendance, and following the NATO Double-Track Decision in 1979, the rally was organised to express widespread opposition to the placement of US nu-

---

30 René Boomkens, "Filosoferen in de Marge van de Zachte Sector," *Krisis: Tijdschrift Voor Actuele Filosofie* 1, no. 2 (October 1980): 12.

31 Boomkens, 12–13.

32 Virginie Mamadouh, *De stad in eigen hand: Provo's, kabouters en krakers als stedelijke sociale beweging* (Amsterdam: Uitgeverij SUA, 1992), 145–48.

33 Cited in: Margreet Fogteloo, "René Roemersma, 27 maart 1958 – 17 februari 2021," *De Groene Amsterdammer*, March 3, 2021.

clear cruise missiles on Dutch soil. However, the protest had little effect and the prime minister at the time, Ruud Lubbers, signed an agreement allowing the placement of the missiles just two years later. The lack of success of movements such as the anti-nuclear lobby, coupled with the scant effect of labour strikes against austerity measures, caused cynicism amongst activists regarding what mass mobilisation could actually achieve (see figure 6.1).[34] A pressing question became whether the state was actually able to achieve leftist goals, or whether it would always present an obstacle to societal change. Questions such as these strongly informed the reception history of Achterhuis' critique on public services: Could the ills of professionalisation and alienation be solved by the state apparatus, or should the solution be sought outside of the state?

As a result, the willingness for collective activism went into decline, left-wing activist circles grew more isolated, and violent clashes with riot police became increasingly common. A narrative about the radicalisation of the "hard Left" was further stoked by the right-wing media after the Revolutionary Anti-Racist Action (RARA), founded by Roemersma, committed a series of bombings on businesses that had trade relations with South Africa.[35] In later reflections by actors of the period, the isolation of the radical Left is commonly associated with the absence of future perspectives. For example, the writer Rob van Essen, a squatter in the 1970s and 1980s, spoke of a "suspended future"—a future that could always wait.[36] The writer Natasha Gerson, also part of the squatters' scene in the 1980s, similarly wrote: "At the time, the youth was collectively no longer required to develop any future perspective."[37] Although specifically not alluded to by Kooten and De Bie in their popularisation of the term, doom-thinking also became a sentiment attributed to the disillusionment of political activism. People either reverted to apathy, looking inwards to their own closed-off social circle in the hope of forming an autonomous group within society, or to violent action.

In Koselleck's terms, both these sentiments—the rise of political apathy

---

34 Duco Hellema, *Nederland en de jaren zeventig* (Amsterdam: Boom uitgevers, 2012), 279–81.

35 e.g., see: Frank Vermeulen, "De Zaligverklaring van René R.," *NRC Handelsblad*, October 22, 1988.

36 Rob Van Essen, *Kind van de verzorgingsstaat: opgroeien in een tijdloos paradijs* (Amsterdam: Atlas Contact, 2016).

37 Natascha Gerson, "Verantwoording? Ja, Daag!," *De Groene Amsterdammer*, August 29, 2007.

**Figure 6.1 Cartoon by Tom Janssen for *Socialisme en Democratie* (March 1985).**

The cartoon depicts the Labour Party Congress in 1985. The figure on the left carries a collection of protest signs and a copy of The International, the figure on right asks "Probably a new member?" The cartoon mocks the new objectivity of the Labour Party, quickly shedding its action-oriented past.

and disillusionment within the Left—point towards a new space of experience that worked in tandem with a suspended future. The cause of this suspension was the continuing discourse on crisis that morphed into the predominance of doom perspectives and a declining belief that the state could offer any alternative. Furthermore, it appeared that the state was actively working against any form of political action that could work towards an alternative. As I will argue in the next section, it was this disillusionment and passivity that raised the issue of what the political collective and meaningful political action could be in the first place.

## 6.2 The Ideological Supplement of the Welfare State

Achterhuis' attack on public services was part of a larger critique of the welfare state that took shape at the start of the 1980s.[38] As became clear in the previous chapter, the welfare state was already under attack during the economic crisis of the 1970s for the presumed negative effects it was having on inflation and employment. Moreover, in a vocabulary of political theory, the growing welfare state was posited as a threat to individual freedoms and democracy in general. As I have argued, these political and economic problems were also seen as cultural problems—as sentiments, ideals, morals, and ethos. With the continued economic malaise of the 1980s, the cultural aspects of these issues intensified whilst the economic aspects disappeared in the background. In particular, the debate shifted, focussing now on the ideological dimension of the welfare state.

The issue of the ideology of the welfare state was often formulated in a historical manner. It was argued that the establishment of the welfare state had been at best a "bit of a motley affair"—a contingent process in which different actors, under the auspice of different ideologies, had built the welfare state as a patchwork quilt. In 1982, the theologian and philosopher Trudy van Asperen argued that, out of this cacophony of ideas, one ideology arose to become the overarching dominant force: Utilitarianism, as formulated by Jeremy Bentham, for its seeming neutrality, had been able to give the welfare state a unified ideology. The state intended to provide maximum happiness for the largest group possible, yet left it up to the personal choices of its citizens to determine how they wanted to satisfy their preferences. On

---

38 Op. cit. footnote 25.

the surface, this seemed a pluralistic solution. For Van Asperen, however, the symbolic order of the state propagated only a single model of ethical life as the right one, namely hedonism, with citizens seeking maximum pleasure. More wholesome visions, in which "humankind [was] searching for the full and harmonious development of his capabilities,"[39] were marginalised by the state's welfare vision.

The consequence of such an ideology was akin to the problems with public services, identified by Achterhuis. The citizen, Van Asperen argued, "appears as affected, as a receiver, in short as a consumer," continuing: "What has disappeared is the human being as an agent, someone who chooses, who acts. Humankind receives treatment but does not treat himself. He appears as passive, not active."[40] Van Asperen invoked terms associated with health care and patients (affected, treatment) and, like Achterhuis, built on a vision in which the caring task of the state turned its citizens into passive consumer "patients". As such, she argued, the welfare state had a suffocating ideology. It was, in effect, a propaganda machine that could not deliver the plurality it promised.[41]

However, precisely the reverse complaint—that the welfare state had an ideological vacuity—was voiced by the sociologist Kees Schuyt. In two op-eds in the newspaper *De Volkskrant* in 1982, Schuyt presented a tragic origin narrative of the Dutch welfare state with the people's general ethos, or collective ideology, in the leading role. The initial establishment of the Dutch welfare state was founded, he argued, on the ethos of solidarity, stemming from the ideology of the post-Second World War reconstruction period. The second construction phase in the 1960s and the 1970s that extended social provision had been founded on a different ideology—one of emancipation and personal development. The tragedy of building the welfare state was that this second ideology had—like some bloody war of succession—killed off

---

39 Trudy van Asperen, "Met de beste bedoelingen... Over de ideologie van de verzorgingsstaat," in *Het bedachte leven: beschouwingen over maatschappij, zingeving en ethiek* (Amsterdam: Boom, 1993), 17. Originally published in *Filosofie en Praktijk*, Vol. 2, No. 4 (1981).

40 Van Asperen, 23. The original Dutch contains a play on the words *behandeling* (treatment, therapy, ministration) and *handeling* (act), which is difficult to render into English.

41 Although not discussed by Jan-Willem Duyvendak, Van Asperen's arguement is in line with his analysis that it was critique from the New Left that ended the "planning of emancipation" ideal (what I called the social planning ideal, discussed in the fourth chapter). See: Duyvendak, *De Planning van Ontplooiing*, 67–68.

that post-war solidarity, placing the ideology of emancipation above all else. However, like in any good drama, this hubris came before a fall. The idealism of the 1960s went astray and degenerated into interest group politics, those of competing societal factions seeking only the protection of their own interests. Accordingly, Schuyt concluded, the common good was shattered, thus ending collective solidarity.[42]

Now with only a fractured sense of solidarity, the welfare state was left without any ideology. Consequently, Schuyt argued, the welfare state started to lose its legitimacy in the eyes of its citizens. Those who did very little work, such as the unemployed, not only received state compensation for their basic needs, but were also provided with some luxury goods. As an example, Schuyt names the compensation women received from the government for contraception as an apparent "luxury good". Without collective solidarity, such extended compensations could not help but appear unfair to those with jobs. The state was giving the most to those who deserved the least—which were, at least in Schuyt's mind, sexually active women.[43] The welfare state was thus not only accused of making its citizens into patients, but also of disintegrating society by stoking feelings of envy amongst its subjects.

Although the two complaints may seem on a superficial level opposing, Van Asperen's and Schuyt's critique on the ideology of the welfare state boil down to essentially the same thing. The existing ideology of the welfare state at the start of the 1980s, with its focus on hedonism, individualism, and interest group politics, was, in reality, a *supplement* for an authentic ideology that had disappeared.[44] Supplement here acquires a double meaning: It was a substitute for something that went missing—a supplement to fill the gap that was left by the original—but it was also an addition, something not part of the original and therefore always superfluous—a surplus. Hedonism and individuality filled the gap real ideology of post-war solidarity, allowing for the welfare state to continue growing, but was superfluous in the sense that it established an alienating symbolic order that pushed other ideologies to the margins. The welfare state had its supplemental ideology of personal expres-

---

42 Kees Schuyt, "Crisis bedreigt verzorgingsmaatschappij," *De Volkskrant*, May 7, 1981.

43 Kees Schuyt, "Particulier initiatief moet weer zelf betalen," *De Volkskrant*, May 8, 1981.

44 I take the notion and analysis of "the supplement" from Jacques Derrida's *Of Grammatology* (1967), see: Jacques Derrida, *Of Grammatology*, trans. Gayatri C. Spivak (Baltimore: Johns Hopkins University Press, 1997), 141–64.

sion. Its citizens, however, still longed for a previous, more genuine ideology.

In terms of the futurists' discourse, it could be similarly argued that the issue of the welfare state's ideology was a problem of future images. As discussed in the fourth chapter, under the auspices of social planning, it had become the state's task to provide images of the future that would foster the future consciousness amongst citizens necessary for political action. However, at the start of the 1980s, it seemed that the state had failed miserably in providing such images. Instead, it had offered a symbolic order of utilitarianism that had merely served to pacify the political agency of its citizens, or offered images of emancipation that fractured society. The state had nothing to offer that might enable any form of collective political action. Instead, only images of economic, environmental, and social disaster were left. "What is the purpose of these statements? A wake-up call? But we were already awake!" Kooten and De Bie had cried when faced with these images.

The impact of this cultural discourse on the welfare state was noticeable in a long election speech delivered by Labour Party leader Joop den Uyl in May 1982. Invoking Kooten and De Bie's term, he identified the missing ideological foundation as one of the major challenges of the coming election:

> [We have] to find a lifestyle that goes against the doom-thinking [*doemdenken*] and that appeals to our creativeness and solidarity. […] The battle for our social system is an ideological one […] since we failed to provide a solid [ideological] foundation when the welfare state came to completion in the years 1965–1977.[45]

Den Uyl's speech was titled *Against the Current*. The tenor of the speech was that multiple societal developments were working against social democratic politics and social democracy was out of step with the underlying current of the time. The developments Den Uyl identified were not only the rise of neoconservatism and neoliberalism, brought together under the notion of the New Right, but also the presence of left-wing doom-thinking.

For Den Uyl, there was a common underlying source for these developments. The New Right was, according to him, not characterised by a specific ideology, but rather by "an attitude, a mentality. An attitude of 'enough is enough' and 'this has to stop now' with all the state provisions of the last

---

45 Joop den Uyl, *Tegen de stroom in* (Amsterdam: Trommel, 1981), 12, emphasis added.

years […]."[46] In other words, he pointed towards a bourgeoise mentality averse to transgression and focussed on conservation. Yet, at the same time, the growth of the public sector and drive for democratisation were to blame for the emergence of this attitude. "Democratisation and [stimulating] debate have sometimes become goals unto themselves and therefore have lost the connection to the idea that social reform means the formation of power [of the workers and the deprived]."[47] As a result, Den Uyl argued, democratisation had led to the accumulation of power in the hands of a new small elite, rather than the people.

Although not expressed explicitly, but alluded to none the less, this new elite comprised the public servants and social workers so criticised by Achterhuis, who supposedly reigned via bureaucratic systems. Den Uyl argued that politicians had failed to sufficiently involve people from the lower-middle, and working classes in their democratisation plans, and consequently, no new formation of power through democratisation had taken place in these classes. This resulted in alienation—much talk of democratisation, but little actual power. As a consequence, an attitude on the Right emerged, expressing the feeling that democratisation and the growth of the public sector— over which the average citizens had little influence—had gone far enough. Simultaneously, an attitude on the Left arose that considered the gaining of power through democratisation of the public sector to be a lie.

In this manner, Den Uyl partly adopted a critique on the welfare state and the public sector that had originated within neoliberal discourse. Den Uyl asserted that democratisation was only to the benefit of minorities and excluded the will of the majority (namely, the bureaucrats and social workers, see the previous chapter), with the crucial difference that the plural "minorities" of neoliberal discourse was swapped for the singular "minority." Such a critique had now taken a cultural turn, focussed on the mentalities and alienation of people, and thus making it more acceptable for a social democratic discourse.[48]

If the Labour Party was to go against the current, it was crucial to recover the connection between democratisation and a cultural attitude of po-

---

46 Den Uyl, 22.
47 Den Uyl, 11.
48 Elsewhere I have argued that Den Uyl's argument is strongly influenced by the public choice theory discourse within the Labour Party. See: Thomas Kayzel, "Towards a Politics of Restraint: Public Choice Theory in the Labour Party of the 1970s," *TSEG - The Low Countries Journal of Social and Economic History* 18, no. 1 (2021).

litical participation. The Left, Den Uyl suggested, had to realise that leftist politics no longer focussed on material welfare, but "that [leftist politics] revolves around—in a cultural sense—the discovery of a life-style that goes against doom-thinking and that relies on creativity and solidarity, inside and outside of one's direct social circle."[49] The problem of the welfare state was a cultural problem and like Van der Zwan (see previous chapter), Den Uyl asked for a cultural solution: an idealism of creativity and solidarity. Although Den Uyl stressed that "the margins for social change [were] narrow,"[50] he also appealed to the futurist discourse of the late 1960s and early 1970s in arguing that imagining new possible futures was important if leftist politics was to realise its full potential. In other words, he wanted to break open the future once again.

Van Asperen and Schuyt had criticised the ideology of the welfare state—or rather, the lack thereof—for fracturing collective solidarity and blocking spontaneous social initiative. It made collective political action impossible. However, even worse, it made unclear what the political collective that could enact social change could be. Den Uyl did not have an immediate answer. Instead, he appealed to a future political collective of lifestyle, creativity, and solidarity. How such a collective might be imagined, remained vague. One thing, however, was certain: The state was not going to provide an image of such a future collective. The idea, under social planning, that the CPB had to provide future imagines, or under the restraint ideal, that planning had to foster a new capitalist spirit, seemed out of the question. Instead, as I will argue in the next section, the social democrats turned to discussions on the relation between the state and society from France in the 1970s for answers.

## 6.3 Democratic Politics Beyond the State: French Discussions

In the spring of 1986, the *Foundation for Research and Development of Social*

---

49 Den Uyl, *Tegen de stroom in*, 30. Den Uyl's rejection of material welfare as the goal for social democratic politics should also be understood in the light of the limits of growth debate, in which it was thought that economic growth was no longer an option (see previous chapter).

50 Den Uyl, 32. "The narrow margins of democratic politics" is a recurring phrase in the writing and speeches of Den Uyl. In 1970, he published an article with that title in *Socialism and Democracy*. See: Joop den Uyl, "De smalle marge van democratische politiek," in *Inzicht en uitzicht: Opstellen over economie en politiek* (Amsterdam: Bert Bakker, 1978), 21.

*Strategies*—an initiative consisting of scholars from the natural and the so-cial sciences, as well as public servants, and closely associated with the faculty of social science at the University of Amsterdam—organised a series of pub-lic debates dubbed *The State-Debate* in the Amsterdam Dominicus Church. Clearly inspired by the work and prose-style of Michel Foucault, the mission statement of the foundation declared dramatically that rules and laws were no longer the main mechanisms of social and political order. Instead, new modes of broad interventions revolving around "strategies" had emerged. In other words, power was decentralised, no longer emanating from one place (the state), but adhering to overreaching strategies. New modes demanded new forms of political action, and social movements had to develop their own strategies to counteract "the shifts in power and influence that were silently happening."[51]

To this end, the foundation invited prominent social scientists from Western Europe, amongst them Claus Offe, Göran Therborn, and Pierre Rosanvallon, to discuss what they referred to as "the contradictions, dilem-mas and deadlocks of the welfare state."[52] Given that the problems of the wel-fare state were by no means unique to the Netherlands, and heated debates on the subject were common amongst many Western European nations, the international outlook of the foundation was not surprising.[53] Collaborating with the national newspaper *De Volkskrant*, which published several con-tributions from the debate, the events generated substantial interest within the intellectual circles of Amsterdam. In a newspaper report on the debates, Achterhuis noted that according to his friends, "it was an event not to be missed."[54] Especially the contribution of Rosanvallon—who Achterhuis called one of the most prominent thinkers on the state living today (together with John Rawls and Robert Nozick)—was sure to generate a great deal of

---

51 Ido Weijers et al., *Consensus of Strijd*, Somso/Staatsdebat 4 (Amsterdam: Siswo, 1986), 137.

52 Weijers et al., 137.

53 For a similar debate in the United Kingdom, see, for example: Peter Taylor-Goo-by, "The Future of the British Welfare State: Public Attitudes, Citizenship and Social Policy under the Conservative Governments of the 1980s," *European Sociological Re-view* 4, no. 1 (May 1988): 1–19; Ellen Boucher, "Anticipating Armageddon: Nuclear Risk and the Neoliberal Sensibility in Thatcher's Britain," *The American Historical Review* 124, no. 4 (October 2019): 1221–45.

54 Hans Achterhuis, "Taal Verhult Gebrekkig Denkvermogen," *Het Parool*, April 12, 1986.

excitement.[55]

The relevance of Rosanvallon's contribution to the Dutch discussion on the welfare state was immediately clear from his opening, as he asserted that the crisis of the welfare state was "cultural rather than economical"—a point already established in the discourse of the Dutch social democrats.[56] Like Den Uyl four years earlier, Rosanvallon considered this cultural problem to be a "deprivation of imagination in relation to the future". However, unlike Den Uyl, he argued that this defect of creativity was a consequence of seeing the state as the sole provider of social wellbeing. The state, however, was becoming "less and less recognisable as a separate institution—a unity that forms the basis for the parliamentary sovereignty." A diffuse state, Rosanvallon argued, demanded politics be imagined in a different manner. Rosanvallon continued:

> The increase of powers [of the state] requires a more decentralized and multifaceted form of welfare, resembling in many ways the flexibility that the family traditionally has provided. This suggests that one major road to [social] change would be to explore the possibilities of re-expanding social policy roles for agencies operating in between the state and the profit-motivated private sectors in a narrow sense: the public-oriented, but privately organised groups such as charities and the traditional family itself.[57]

In other words, social politics centred on the state formed an obstacle to imagining the future. Opening up the future horizon thus entailed imagining a form of "politics beyond the state", focussing on a political sphere in between state and market. Rosanvallon's contribution to the Dutch discussion within the Labour Party consisted of the suggestion that solidarity was neither to be found on the level of the state, nor on the level of civil society or the market. He identified a fundamental tension within the search for a collective solidarity—the same tension that was so central to social-democratic discourse. Moreover, the search for a new solidarity contained an implicit assumption of a unified people, something Rosanvallon denounced as potentially totalitarian—precisely that which entailed a narrowing of the

---

55 Hans Achterhuis, "Stuurman Verdwaalt Soms in Labyrint van Staatsdebat," *De Volkskrant*, March 1, 1986.
56 Pierre Rosanvallon, "Voorbij de Verzorgingsstaat," *De Volkskrant*, April 12, 1986.
57 Rosanvallon.

future and an undoing of the interpersonal contact needed for solidarity. Any politics that was based on (or oriented towards) the state, market, or civil society was always prone to this totalitarian allurement.

Rosanvallon's words resonated powerfully with the Dutch debate on the ideology of the welfare state at the start of the 1980s. This is perhaps unsurprising, as Rosanvallon's ideas were developed against the background of similar discussions in France. Indeed, the central notions of the Dutch debate—the state, ideology, collective solidarity (or idealism), and the unity of society—were already discussed extensively by Rosanvallon's teachers, Claude Lefort and François Furet, in the 1970s. To understand how these French ideas would eventually find their way into the Dutch social democratic debate, it is worthwhile to briefly discuss their context.

Lefort and his students, amongst whom were Furet, Rosanvallon, and Marcel Gauchet, marked a remarkable shift towards liberalism amongst left-wing intellectuals in the 1970s. Historians such as Michael Scott Christofferson, Andrew Jainchill, and Samuel Moyn have argued that this liberal shift was a reaction to an internal power struggle within the French Socialist Party (*Parti socialiste*, PS).[58] In 1972, under the leadership of François Mitterrand, the party had entered an election alliance with both the Communist Party (*Parti communiste français*), and the Radical Party of the Left (*Parti radical de gauche*). Mitterrand's leadership was challenged in 1974 by Michel Rocard, representing the Christian and non-Marxist wing of the party. Fearing that the alliance with the communists would bring out the totalitarian tendencies of leftist politics, and mistrusting the centralised and state-oriented nature of the common party manifesto of the three parties, Rocard's candidacy was backed by Lefort, Furet, and Rosanvallon.[59] This movement would become known under the name the Second Left (*la deuxième gauche*), after a description given by Rocard at a party congress in 1977.[60] The conflict between the

---

58 Michael Scott Christofferson, "An Antitotalitarian History of the French Revolution: François Furet's Penser La Revolution Française in the Intellectual Politics of the Late 1970s," *French Historical Studies* 22, no. 4 (Fall 1999): 557–611, https://doi.org/10.2307/286759.

59 Daniel Zamora, "Finding a 'Left Governmentality': Foucault's Last Decade," in *Foucault, Neoliberalism, and Beyond*, ed. Stephen W. Sawyer and Daniel Steinmetz-Jenkins (London: Rowman & Littlefield Publishers, 2019), 53–72.

60 Michael C. Behrent, "Liberalism without Humanism: Michel Foucault and the Free-Market Creed, 1976–1979," *Modern Intellectual History* 6, no. 3 (November 2009): 552–55, https://doi.org/10.1017/S1479244309990175; Michel Winock, "La Deuxième Gauche Dans l'histoire Du Socialisme," *Le Débate*, 2019.

state, an industrial reform-oriented Left wing of the PS, and the anti-totali-
tarian Right wing is comparable to the discussion between the Left and neo-
liberal Right wing of the Dutch Labour Party (see previous chapter), with
the neoliberal expressing a similar fear of totalitarianism. The discussion in
France, with the involvement of the communists, was much fiercer.

Furthermore, Iain Stewart has argued that Lefort's, Furet's, and Rosan-
vallon's writings can also be interpreted as a belated reaction to the May 1968
protests. When, in the legislative elections of June of 1968, the Gaulist Union
for the Defence of the Republic party won in a landslide, it was clear to many
protesters that national elections were not the vehicle via which to achieve
their goals. Consequently, parts of the protest energies were channelled into
dispersed social movements that focused on changing civil society rather
than the state. Their efforts often focussed on single issues, such as prison
reform and anti-psychiatry.[61] These social movements came in different fla-
vours. More radical and militant variants attacked the whole of capitalist
society, whilst more moderate factions sought the emancipation of different
groups in society and decentralised forms of organised labour.[62] This devel-
opment was closely  watched by Cold War liberals, such as Raymond Aron,
who welcomed the focus on civil society rather than the state, but feared that
the revolutionary élan of the social movements would undermine the gen-
eral ethos of society.[63] These developments raised the question of what the
transformation of civil society precisely entailed, especially in relation to the
state. Lefort took up these questions in a series of influential writings on the
distinction between the state and society in relation to democracy.

Lefort is famous for his definition of "the political" in opposition to
"politics". Like Carl Schmitt's paradigmatic definition, from which he bor-
rows, Lefort stressed the struggle and ideological strife inherent to the polit-
ical. Attempting to carve out a unique space of politics different from other
forms of discourse in society, Lefort placed authority and the normative or-
der at the core of the political.[64] However, unlike Schmitt, Lefort's "political"

---

61  Iain Stewart, *Raymond Aron and Liberal Thought in the Twentieth Century* (Cam-
bridge, UK: Cambridge University Press, 2019), 225–26.
62  The second variants had their roots in the Christian Labour Union *Confédération
française démocratique du travail* (CFDT), who promoted the idea of *autogestion* as
a new form of self-organising labour. Rosanvallon was one of the main theoreticians
of this new labour philosophy. See: Pierre Rosanvallon, *L'Age de l'autogestion, ou la
Politique au poste de commandement* (Paris: Seuil, 1976).
63  Stewart, *Raymond Aron*, 219.
64  Samuel Moyn, "Concepts of the Political in Twentieth-Century European Thought,"

did not revolve around a historical facticity of the friend-enemy distinction. Rather, it focussed on how society might establish its own unity without the decision of the sovereign. In a reversal of Schmitt's logic, Lefort argued that when society was faced with social differentiation in terms of a division of labour or different forms of private reasoning, it would externalise the power of society into an external entity that had to give society its symbolic coherence. This entity was the state. As in Thomas Hobbes' theory, the state made the multitude of society into a single people.[65] However, different to Hobbes, it was the act of society itself that externalised its power into the symbolic body of the state. Society would use the symbolic order of the state in the form of the law to re-establish its unity by embodying the law in different social organisations, such as churches, guilds, and councils, in a process of institutionalisation.[66]

Borrowing a piece of psychoanalytic theory of Jacques Lacan on the mirror stage of the pre-individualised infant, Lefort argued that this institutionalisation process was imperfect.[67] Society mirrored its symbolic identity in the state's symbolic order to integrate itself into a unity, even if the state's symbolic order was fundamentally different from that of society. Consequently, it mistook the symbolic for the real. In Marxist and Lacanian terms, this meant that society alienated itself from its very real practices. There was always a gap, a residue, an irreducible difference, between the symbolic and the real, between society and its external point of reference.[68] This process of appropriating the symbolic order of the state into the symbolic order of society was what Lefort called the political. The struggle of the political was the institutionalisation of the external authority of the state into the different organisations of society, resulting in different discourses—on religion, on the economy, on science—each with their own social authorities.

---

in *The Oxford Handbook of Carl Schmitt*, ed. Jens Meierhenrich and Oliver Simons (Oxford: Oxford University Press, 2016), 291–311, https://doi.org/10.1093/oxfordhb/9780199916931.013.003.

65 Thomas Hobbes, *Leviathan*, ed. Richard Tuck (Cambridge, UK: Cambridge University Press, 1991), chap. 16, 144.

66 Claude Lefort, "Outline of the Genesis of Ideology in Modern Societies," in *The Political Forms of Modern Society* (Cambridge, MA: MIT Press, 1986), 184.

67 Samuel Moyn, "Claude Lefort, Political Anthropology, and Symbolic Division," *Constellations* 19, no. 1 (2012): 43, https://doi.org/10.1111/j.1467-8675.2011.00666.x; Jacques Lacan, "The Mirror Stage as Formative of the I Function as Revealed in Psychoanalytic Experience," in *Écrits: The First Complete Edition in English*, trans. Bruce Fink (New York, NY: W. W. Norton & Company, 2006), 75–81.

68 Lefort, "Ideology in Modern Societies," 184.

Before the advent of modernity, society had externalised its power via the authority of the king. In Ernst Kantorowicz's famous terms, the king possessed two bodies: one mortal reigning over his subjects, and one immortal, symbolising the Godly order underlying the order of society.[69] However, in the French Revolution, the king's head was chopped off, leaving a symbolic empty space where the external power had once been.[70] Now, in a process of *politics*, different from the political, different social organisations were trying to fill the empty space in a new imaginary of power. In this imaginary, society sought new, as yet not existing images of what the symbolic order of society could be. In the French Revolution, this was the new sovereign of a unified people, best expressed in Jean-Jacques Rousseau's idea of the general will. However, in less revolutionary terms, this could also be the utopian dream of an equal and just society—in other words, idealism.[71]

What the radicals of May 1968 were doing when striving for social reforms was creating an imaginary that could fill the empty seat of power—something that could eventually mirror the symbolic order of society. Although not named by Lefort, his emphasis on future visions is similar to futurist discourse, in which social organisations were projecting their particular vision of the future as an ideal for society as a whole—the creation of an imaginary. Emancipating prisoners and psychiatric patients thus entailed the struggle of the political over how authority should be distributed in a society. Yet, in line with Aron, Lefort warned against the more radical parts of the reform movement.[72] For Lefort, the essence of democracy was that this external seat of power should always remain empty. Idealism always had to remain an imaginary; the *difference* between the imaginary and the symbolic order of society allowed for democratic politics as a struggle of different imaginaries. Because there was always an irreducible difference between the symbolic order and the imaginary, there was always a space for society to imagine itself in a better form and strive towards that form. Revolutionary

---

69 Claude Lefort, "The Permanence of the Theologico-Political?" in *Democracy and Political Theory*, trans. David Macey (Cambridge, UK: Polity, 1988), 244; Ernst Kantorowicz, *The King's Two Bodies: A Study in Mediaeval Political Theology* (Princeton, NJ: Princeton University Press, 1957).

70 Claude Lefort, "The Question of Democracy," in *Democracy and Political Theory*, trans. David Macey (Cambridge, UK: Polity, 1988), 20.

71 Arthur Ghins, "'Popular Sovereignty That I Deny': Benjamin Constant on Public Opinion, Political Legitimacy and Constitution Making," *Modern Intellectual History* First view (2020).

72 Stewart, *Raymond Aron*, 219.

and emancipating politics would become an ideology when the symbolic was completely identified with the imaginary. Democratic politics would become totalitarian if society would self-identify with the imaginary of the external seat of power, collapsing the distinction between state and society, as Lefort believed had happened in fascism and national socialism.[73]

Lefort's identification of the totalitarian tendencies in revolutionary politics was further elaborated by Furet. In his landmark study *Interpreting the French Revolution* (1978), Furet argued that the Jacobins had not so much spoken for a pre-established people of France in the general assembly, but rather had created the revolutionary subject of the unified people as an imaginary. However, in this very first moment of democratic politics, so Furet suggested, the Jacobins had already given in to their totalitarian urges by making this social imaginary of the unified people sovereign, thus placing it on the external seat of power.[74] Both society and the state were identified with the people: The difference between the two appeared unwanted. As spoke persons for the people, Jacobins could square the circle by excluding those who disagreed with them as not being part of the people, or even worse, as enemies of the people. Therefore, the reign of terror that ensued was justified as the enemies of the people were not part of the revolutionary subject.[75]

Reacting against the alliance of the Socialist Party with the communists, Furet radicalised Lefort's thought by collapsing the distinction between idealism and ideology. The mistake of the Jacobins had not only been that they had placed the people on the seat of the sovereign, but also that they had imagined the people as an undividable unity. With the social imaginary of a unified people, the exclusion and oppression of those who disagreed in the general assembly had already begun. Any idealism that dreamt of a unified people was thus ideological and inhabited totalitarian tendencies. Bringing his historiographical intervention to the present, Furet accused Mitterrand's coalition of being on the path towards totalitarianism—akin to Stalin's course in the Soviet Union—by attempting to speak for the uni-

---

73 Lefort, "Ideology in Modern Societies," 203.

74 François Furet, *Interpreting the French Revolution* (Cambridge, UK: Cambridge University Press, 1981), 70.

75 Furet, 291; For a Schmittian interpretation, see: Dan Edelstein, "Red Leviathan: Authority and Violence in Revolutionary Political Culture," *History and Theory* 56, no. 4 (2017): 76–96, https://doi.org/10.1111/hith.12039.

fied people of France.[76] To circumvent this totalitarian tendency inherent to all democratic movements, Furet proposed a (neo)liberal solution. The pluralism of society could be safeguarded if parts of the symbolic order of the state were specifically not filled in the political struggle of competing imaginaries. In other words, like the German ordoliberals (see section 4.3) and the Dutch neoliberals (see section 5.5), Furet believed that some tasks of the state should be shielded off from democracy in order to make democracy possible. Perry Anderson has argued that deep down, Furet longed for a constitutional monarchy, in which a liberal monarch could again provide the symbolic order for the unity of society.[77] This has been described by James Ingram as "democracy against democracy."[78]

Rosanvallon followed Furet's argument in his assertion that every politics aimed at the vison of a unified people was inherently totalitarian in nature. However, closing off part of the state from democratic politics was not an attractive alternative for Rosanvallon. Here he remained true to Lefort's initial idea that saw the constant pursuit a wholistic vision for society as the core of democracy. Consequently, possible reform of the whole symbolic order of the state should be part of the political struggle. In other words, reforming democratic institutions, such as the voting system and parliament, should remain part of the political endeavour.[79] Complicating matters further was the fact that Rosanvallon, unlike neoliberals generally and Furet in particular, did not consider the market a viable alternative as a channel for the emancipation of politics.[80] Indeed, quite the opposite was true: The imaginary of the market could just be as totalitarian as the imaginary of the state. Rosanvallon argued that just like idealism that imagined a unified people, the market also imagined society as a harmonious and spontaneous order of self-regulation that assured peace and prosperity without politics.[81]

---

76 Christofferson, "An Antitotalitarian History of the French Revolution," 559.

77 Perry Anderson, "Dégringolade," *London Review of Books*, September 2, 2004, https://www.lrb.co.uk/the-paper/v26/n17/perry-anderson/degringolade.

78 James D. Ingram, "The Politics of Claude Lefort's Political: Between Liberalism and Radical Democracy," *Thesis Eleven* 87, no. 1 (November 1, 2006): 46, https://doi.org/10.1177/0725513606068774.

79 Pierre Rosanvallon, "Revolutionary Democracy," in *Democracy: Past and Future*, ed. Samuel Moyn (New York: Columbia University Press, 2006), 79–88.

80 Pierre Rosanvallon, "The Market, Liberalism, and Anti-Liberalism," in *Democracy: Past and Future*, ed. Samuel Moyn (New York: Columbia University Press, 2006), 147–59.

81 Pierre Rosanvallon, *Le Capitalisme Utopique: Critique de Idéologie Economique*

Consequently, the social imaginary had to find a way that provided a unified society, but not a unified people. As a historian, Rosanvallon identified *democratic moments* in political history that had actually achieved this "double difference from state and market."[82] The Marquis de Condorcet's proposal for a weighted election system was an example, as was the introduction of universal suffrage.[83] These systems had given equal voting rights to each citizen, thus creating a unified symbolic order of society, but had not imagined an equal society. The general will of the voting population had therefore been pluralistic in nature. The introduction of social insurance had been another example, adhering to a collective risk whilst keeping the motivation for taking social insurance individualistically motivated.[84] The challenge for politics in the 1980s was thus to find imaginaries for society that could adhere to these democratic moments. This entailed an imaginary of society that followed neither the presumed unity of the state, nor of civil society—"imagining political society in its double difference both from the state and from civil society. […] to get beyond the utopia of the market, but not at the price of substituting for it an impossible communitarian ideal."[85] All of these alternative imaginaries—the state, the market, and a communitarian civil society—represented the lure of a harmonious unified order, repression, and a regime of terror.

Properly understood, this entailed a softening of Lefort's distinction between politics and the political. Both politics and the political were the quest of institutionalising the symbolic order in a pluralistic manner. As a result, politics in its imaginary quest was not focussed on the external point of the state, as Lefort had thought. Thus, society had to find symbolic orders other than the state or the market, in which to mirror itself. This did not mean that the state was exempt from politics, but rather, as Ingram suggests, that democratic politics had to be a "democracy against the political."[86] What safeguarded the essential irreducible difference of the imaginary from the

---

(Paris: Editions du Seuil, 1979); see also: Rosanvallon, "The Market, Liberalism, and Anti-Liberalism."

82  Rosanvallon, "The Market, Liberalism, and Anti-Liberalism," 158.

83  Pierre Rosanvallon, "The Republic of Universal Suffrage," in *Democracy: Past and Future*, ed. Samuel Moyn (New York: Columbia University Press, 2006), 98–116.

84  Pierre Rosanvallon, *La Crise de l'État-Providence* (Paris: Editions du Seuil, 1981).

85  Rosanvallon, "The Market, Liberalism, and Anti-Liberalism," 158–59. Originally published in: *Esprit* 251 (March 1999): 161–70

86  Ingram, "The Politics of Claude Lefort's Political," 46.

symbolic order was not an empty seat of power, but the anti-idealistic imaginary of a plural yet equal society.[87]

As I will show, Rosanvallon's critique on state-oriented politics formed a challenge to the prominent planning ideals in the Netherlands. Both the social planning ideal and the restrained ideal had, both in their own way, been planning of the state. In the former case, politics had become manifest in the participation of civil society in state decisions, whereas in the latter case, planning had made the political impossible as the external seat of power was shielded from the practice of politics.

With these French discussions, the Dutch problem of the ideology of the welfare state as identified by Schuyt and Van Asperen (as discussed in the previous section) can be reformulated. Schuyt's complaint about the absence of an ideology (better understood as idealism in Lefort's terms) was that there was no imaginary of the state as an external point of power that provided a symbolic order offering unity to the different organs of the welfare state. Van Asperen identified utilitarianism as the symbolic order of the state. However, (in Lefort's terms) this order had been an ideology, forcing a self-identification of society with utilitarianism, thus making a social imaginary impossible. In the larger argument of this thesis, it could be argued that planning under the social planning ideal had committed the grave sin of attempting to provide a symbolic order of the state, whilst also meddling with the imaginary of society. Under the French critique, planning became wholly discredited. The challenge identified by Den Uyl was thus to seek a democratic moment in which a new imaginary of collective solidarity could be found without it becoming a totalising ideology of either the state or social planning.

This challenge was taken up in particular by the sociologist Paul Kalma, who worked for the Labour Party think tank (*Wiardi Beckman Stichting*) from 1978, and would, in 1986, become the director of that same institute. In 1982, in reference to the works of Lefort, Furet, and Rosanvallon, Kalma published a harsh attack on the ideal of the democratic state.[88] Those social democrats who had seen the state as the main vehicle for leftist policies, hop-

---

87 Rosanvallon's rejection of idealism is characteristic of the renewed 'end of ideology' discourse that took hold of global economic order after the collapse of the Berlin Wall. See: Jacob Collins, "A Metaphysics of Democracy," *New Left Review*, no. 74 (April 1, 2012): 145–54.

88 Paul Kalma, *De illusie van de "democratische staat,"* WBS Cahiers (Deventer: Kluwer, 1982).

ing that the state could be controlled democratically, had fallen for the pitfall of wanting "to merge the state, society and democracy, entirely in the radical democratic tradition of 'people's sovereignty', into one harmonious whole."[89] The social democratic tradition, Kalma suggested, had, with its ideal of a democratic state, fallen into the trap of a totalitarian dream. Saving democracy from its own tendency of totalising unity, it was important to uncouple the idea of democratisation from the state. This meant the decoupling of a connection that social planning had aimed to strengthen in the 1960s and 1970s (see chapter four). Instead, Kalma situated democracy within society, whilst also warning against that other pitfall—the idea of a democratic civil society. Kalma states:

> [T]he creation of "independent administrative bodies" for each policy sector could easily lead to interest groups operating in that sector, rather than implementing the policy set by government and parliament, making their grip on political decision-making even greater than it already is.[90]

In other words, civil society, as the main vehicle for democracy would undermine nation-wide solidarity and only give interest groups more power. Like Rosanvallon, Kalma was looking for an imaginary focussed neither on the state nor civil society.

As Rosanvallon had suggested in his lecture in Amsterdam, Kalma sought the political imaginary in the space between state and market. In 1981, together with Edwin Wolffensperger, he published an article in *Socialism and Democracy*, in which—inspired by similar proposals by the French social democrat, and Rochard's associate, Jacques Delors—they argued for the opening up of a new space between the state and the market: a space in which public services could be organised and maintained, not by state bureaucrats and professionals, but by citizens themselves. Such a sphere, they argued, could be organised in a decentralised fashion, built on a local scale, and malleable enough to adapt to citizen preferences and stimulate private initiatives. In other words, it could be flexible like the market, but without the egoism and fetishism of profit. A noteworthy feature of this third sphere was that both Kalma and Wolffensperger conceptualised the boundaries be-

---

89  Paul Kalma, "De illusie van de 'op rolletjes lopende staat,'" *Hollands Maandblad* 24, no. 421 (December 1982): 18.
90  Paul Kalma, "Recensie van 'Troelstra's nieuwe staat,'" *Socialisme en Democratie* 38, no. 2 (February 1981): 106.

tween this space, the state, and the market as fluid, flowing over into the spheres of state and market. The tasks of the state could be outsourced to the third sphere, whilst services could freely shift from the market sphere to the third sphere and *vice versa*. In short, what Kalma and Wolffensperger were conceptualising was not so much a sphere *between* state and market, but rather a diffuse society, in which there were no clearly delineated tasks and positions of the state, the market, or indeed those that lay between them. This latter step was important, since it adhered to Rosanvallon's anti-neoliberal ideas that the state should be wholly uncoupled from society. Instead, democracy still influenced the state by taking over its task, but not by providing an imaginary for it.

Although Kalma and his associates reacted against neoliberal ideas on the separation between state and society, it is remarkable that the terminology that they used to describe this diffuse society was eerily similar to the jargon of the neoliberals. Kalma put his faith in *private initiative*, writing that "private initiative is probably the best guarantee for a diverse, mobile welfare sector"—a plea, he claimed, that had been taboo within the Labour Party up to that point.[91] Moreover, Kalma stressed the need for labour relations to be both *flexible* and *decentralised,* and used the same notions to describe the virtues of the third sphere. Flexibility in this context meant not only a departure from the top-down Taylorian system of industrial relations, entailing more freedom for the labourer to determine how and when to work, but also less job security, making it easier for companies to fire employees.[92] Similarly, Kalma suggested that the government should make more use of market mechanisms (*marktwerking*) in their policies. Although Kalma meant something quite different from neoliberals when he spoke of "market-oriented" measures—namely, that the government could "become active on key-markets by setting up companies themselves"[93]—the aim of these measures was the same: to stimulate competition. Notions closely associated with neoliberalism were also used by Van Asperen when she argued that the

---

91  Paul Kalma and Edwin Wolffensperger, "Grenzen aan de verzorging," *Socialisme en Democratie* 38, no. 7–8 (August 1981): 383 emphasis added.

92  Paul Kalma, "Om de beweegelijkheid van de arbeid," in *De Verzorgingsstaat: Slopen of Renoveren?* ed. Will Albeda and Joop Wemelsfelder (Assen: Van Gorcum, 1986), 29–58.

93  Paul Kalma and Marnix Krop, "Verzorgingsstaat en klasse(n)compromis," *Socialisme en Democratie* 39, no. 6 (June 1982): 268.

welfare system "lacked incentives."[94] Going beyond the "horrible regulations" of the state, the unemployed would be given more incentives to actively seek work.[95]

Another notion typifying the diffuse society was creativity;[96] the same notion Den Uyl and Rosanvallon had marked out as an important aspect for imagining new futures. It was thus thought that escaping the oppressive ideological supplement of the state, moving politics towards a new sphere, would bolster idealism, leftist ideology, and solidarity. However, in such a vision of the future, solidarity was not univocal across society, but always local and always different. This, however, meant that social policy had to be disaggregated, and that the welfare state was no longer the designated institution for providing diverse social policy.

## 6.4 From Ideology to Ethos: New Forms of Citizenship

It is perhaps important to stress that neither Rosanvallon nor Kalma were arguing for the abolishment of the state, nor were they anti-parliamentarians. The state remained vital for specific tasks, even providing some form of welfare. Parliament was also still acknowledged as one of the most important representative institutions. As noted above, at the heart of the matter lay the notion that the tasks of the state were piling up, making the state evermore powerful, whilst the contours of the state itself—especially in the social planning ideal—became vaguer. For Rosanvallon, this latter development indicated that the sites of politics became more dispersed, which he regarded in essence as a positive development. He argued that what had made De Condorcet's insight on the representation of the people so valuable was its emphasis on the intermediate institutions necessary to represent the people as plural—precisely that which the Jacobins deemed a perversion of the general will. With a proliferation of mediating institutions, the boundaries of the state became vaguer, but the possibility of representing a plural people also became more viable.[97]

---

94 Michèle De Waard, "Trudy van Asperen en het bedreigde burgerschap; 'De ethicus is geen brandweerman,'" *NRC Handelsblad*, December 14, 1990.

95 Ibid.

96 Kalma, "Om de beweegelijkheid van de arbeid."

97 Pierre Rosanvallon, "From the Past to the Future of Democracy," in *Democracy: Past and Future*, ed. Samuel Moyn (New York: Columbia University Press, 2006),

The proliferation of intermediate institutes brought with it the risk of what public administration scholar Mark Bovens has called *the relocation of politics*.[98] Important political decisions were no longer made by parliament, but instead dispersed amongst intermediate levels and international organisations that were not necessarily democratic and often, by their very nature, lacked transparency. Therefore, the tasks of democratic politics became, so Rosanvallon argued, to focus critical attention on these intermediate organisations and to make them accountable, transparent, and ultimately legitimate—albeit not necessarily public or state-owned.[99] However, with this new political task, the idea of citizenship also changed. Its primary task was no longer to discuss or formulate a general will or common good, but rather to check on the institutes of power and make them accountable. Later, Rosanvallon called this new form of politics *counter-democracy*, which described the people (or the public) as shapeshifters, entering into existence through ad-hoc and temporary alliances, and disappearing just as easily, forming issue specific movements.[100] Democracy, with such an amorphous citizenry, takes place on a multiplicity of locations, with each place of power—whether public, private, collective, national, or international—becoming a potential site for politics. As it turns out, and as I will argue in this section, the ideal of *regulatory planning* emerged as a response to this relocation of politics and new conception of citizenship.

Imagining a space between the state and the market—and making the boundaries between spheres more porous—the discussion on social services started to shift from the ideology of the welfare state to the ethos of the citizen. A keen observer of this discursive shift was Bovens when, in 1991, he predicted: "Citizenship is set to become the term of jubilation on the 1990s."[101] The popularity of this notion, he continued, could be explained through the waning of ideology: "In a time when we're again losing all great ideologies, citizenship provides a good foundation for political meaning.

---

189–217.

98  Mark Bovens et al., *De Verplaatsing van de Politiek: Een Agenda Voor Democratische Vernieuwing* (Amsterdam: Wiardi Beckman Stichting, 1995).

99  Pierre Rosanvallon, "Postscript: Democracy in an Era of Distrust," in *Democracy: Past and Future*, ed. Samuel Moyn (New York: Columbia University Press, 2006), 252.

100  Pierre Rosanvallon, *Counter-Democracy: Politics in an Age of Distrust*, trans. Arthur Goldhammer (Cambridge, UK: Cambridge University Press, 2010).

101  Mark Bovens, "Burgerschap of Burgerzin?," *Beleid & Maatschappij* 18, no. 3 (May 1991): 113.

Instead of the market, the state or civil society, citizenship focuses on the political community of free and equal citizens."[102] However, as he concluded, such narratives about citizenships were often criticisms of the state in disguise: "[C]itizenship must provide the care and attention in places were the welfare state and bureaucratised civil servant cannot provide it. [...] Civic responsibility disguised as citizenship has to provide integration [into society] in the moments when the welfare state falls short."[103] In the terms of Lefort, totalising imaginaries of the state, market, or civil society were no longer feasible (since they amounted to ideology as Furet and Rosanvallon had argued). Instead, society had to find its unity (to integrate itself) in the imaginary of citizenship. As noted above, for authors such as Schuyt, the welfare state was a motor for social differentiation, producing a distinction between those who profited from the social services and those who did not. As such, it could not live up to its ideal of true emancipation.[104] Citizenship could perhaps carry out the task that the welfare state started or, more cynically, mask the failings of the welfare state.

The idea of civic ethos solving problems that had become unattainable for the state was fleshed out in a report from the Scientific Council for Government Policy (*Wetenschappelijke Raad voor Regeringsbeleid*, WRR) on city development from 1990.[105] The report opens by representing the recent attention for city development as a consequence of globalisation, skilfully concealing the political decisions behind such a focus. Cities were the new economic hubs, reflecting the general shift from industry towards the service sector. Accordingly, centralised economic management was inadequate, as only the city could bear the flexibility demanded in a changing global economy. However, as the WRR suggested:

---

102 Bovens, 113.

103 Bovens, 114. The fact that the discussion on citizenship was actually a continuation of the discussion on the welfare state was also noticed by De Haan, see: Ido de Haan, "De lachspiegel van het burgerschap," in *De staat van de burger: Beschouwingen over hedendaags burgerschap*, ed. Jan-Baptiste Simonis, Anton Hemerijck, and Percy Lehning, Beleid en Maatschappij Jaarboek (Amsterdam: Boom uitgevers, 1992), 161–79.

104 See also: Anton Hemerijck, Jan-Baptiste Simonis, and Percy Lehning, "De herontdekte burger," in *De Staat van de Bruger: Beschouwingen over Hedendaags Burgerschap*, Beleid en Maatschappij Jaarboek (Amsterdam: Boom uitgevers, 1992), 9–24.

105 Wetenschappelijke Raad voor Regeringsbeleid WRR, *Van de stad en de rand*, Rapporten aan de Regering 37 (The Hague: Sdu Uitgeverij, 1990).

> [T]he institutional conditions for metropolitan policy are not automati-
> cally improved if government tasks are simply transferred from the cen-
> tral to the local level. The institutional context of current metropolitan
> policy has become too clogged for such a thing to happen. These block-
> ades can only disappear if the policy is based more on the primary re-
> sponsibilities in social life.[106]

The WRR stressed that simple decentralisation would not work. Instead, it
looked to "Anglo-Saxon *civic culture*," which could provide the impetus for
entrepreneurs and citizens alike to act in quick and inventive ways. Key to
civic culture was the interaction and collaboration between the different ac-
tors it enabled, providing

> the direct exchange of interests between very different social groups […]
> not just the relationship between the government and the major inves-
> tors, but also the relationship between the tenant's association and the
> real estate investor, the environmental organization and the oil company,
> the minority organization and the employers' association, the neighbour-
> hood organisation, and the investment bank.[107]

Creating agile, temporary alliances would give city actors the ability to an-
ticipate the challenges of the globalised world. As this report makes clear,
citizenship was not only the ground for local solidarity; it also went hand in
hand with a neoliberal ethos of global economic challenges.

That the WRR was not so much charting the problems of the future, but
more reacting to the trend of the time, becomes clear when the urban devel-
opment report is comparted with a memorandum from 1990 written by the
parliamentary committee for Constitutional and Administrative Innovation
led by the Speaker of the House of Representatives at the time, Wim Deet-
man. According to the committee, the government's undertakings, under-
stood as "the integral alignment of means and ends on a national level" and
embodied in the integral planning techniques (as discussed in chapter four),
had led to "the specialisation and fragmentation [*verkokering*] of representa-
tion [i.e., interest groups], bureaucracy, the cabinet and civil society."[108] The

---

106  WRR, 35–36.
107  WRR, 37.
108  Wim Deetman, "Staatkundige, bestuurlijke en staatsrechtelijke vernieuwing,"
Kamerstukken II , 1990–1991, 21427 no. 3, 7.

problem was that the citizen was never asked to perform a similar alignment of means and ends, but still had to bear the cumulative consequences of the fragmented state. The solution was to consign governmental tasks to lower administrative levels whilst involving social organisations, creating shared aims through "administrative accords, covenants and agreements."[109] Regulation had become too complex and there was little support for top-down decrees. Instead "a flexible, practice-oriented government" was needed, "in which contract management and independent administrative bodies are deliberately striving to improve the quality of policy."[110]

One can wonder whether this flexible practice-oriented government really did open the space between the state and the market as Rosanvallon and Kalma had argued. The memorandum still placed emphasis on the state's tasks, rather than placing the diffuse society at the centre. Deetman's proposal, however, does show some important structural similarities with the idea of the third sphere. Most importantly, the path of democratic policymaking no longer led inevitably through the state apparatus. Instead of influencing the state in its capacity as policymaker, citizens were now co-producers of policy. Democracy did not mean that the people controlled or steered the state, but rather that citizens collaborated with the state in a local process of policymaking. Moreover, political allegiances were flexible, ad-hoc, and temporary, allowing for collaboration where necessary, but also individuality where desired. Such an idea of democracy asked for a creative, flexible, and proactive form of citizenship as defined by the WRR.

The citizen and the ethos of citizenship thus became the foundation of a form of politics beyond the state. In this context, sociologist Willem Schinkel speaks about the *virtualisation of citizenship*, denoting a shift from a conception of citizenship revolving around duties and rights in relation to the state, towards a conception in which the morals and virtues of citizens themselves are central.[111] "Virtualisation" is a poly-semantic notion, referring to the modern notion of virtue, but also to the Machiavellian idea of *virtù*, which means the power to potentially act in an effective manner, denoting a virtual possibility rather than an actual one. That is to say, *virtù* is the potential for citizens to react swiftly when opportunities occur in order to seize the mo-

---

109 Deetman, 8.
110 Deetman, 14.
111 Willem Schinkel, "De virtualisering van burgerschap en de paternalistische staat," *Sociologie* 5, no. 1 (January 2009): 48–68.

ment, or adapt flexibly. For example, if citizens had the *virtù* to transform their current job skills and rebrand themselves for the constantly changing job market, job insecurity was less of an issue. What matters is not the skills one has but how one can adapt in the future. Citizenship in its virtual understanding refers both to a civic culture in which the virtue of citizens is cultivated, and to the *virtù* of citizens to act adequately and effectively in the situations that the jumble of the globalised world provides. Schinkel sees this form of citizenship, propagated by the Dutch government since the 1990s, as a way of actively intervening in the lives of subjects at a time when states were less and less able to intervene in the economy, and political power was less and less centred around the state. In other words, the virtualisation of citizenship is the consequence of a neoliberal global economic order and the dislocation of politics.[112] As a parallel point, I would argue that this relation is a two way street: A virtualisation of citizenship was a *condicio sine qua non* for the state to displace its tasks and shift from an interventionist, legal mode to a coordinating or managerial one.

With the citizenry now their own little sovereign decision-makers—mini-kings, as Gerard de Vries would say—the task of the state as collaborator had to change accordingly.[113] Direct regulations were no longer fashionable. Instead, the "regulatory" state had to provide an infrastructure that would allow for citizens and agencies to collaborate. To this end, the state had to take care of the establishment of agreements, including their coordination and inspection. Instead of doing this directly through a central administration, the Deetman-memorandum argued for the establishment of independent administrative authorities (*zelfstandige bestuursorganen*, ZBOs) that could carry out these tasks. These ZBOs were administrative organisations that did not fall under the jurisdiction of any ministry or government, but whose tasks and governance are, nonetheless, established within the law. Examples of such ZBOs were the Authority for the Financial Markets and

---

112 Schinkel identifies another important driving force underlying the discourse on citizenship, namely the perceived problem of the integration of migrants, or citizens with a migrant background, into society. Similarly, the WRR played an important role in a series of reports, conceptualising these issues as problems of citizenship. See: Wetenschappelijke Raad voor Regeringsbeleid WRR, *Etnische minderheden*, Rapporten aan de Regering 17 (The Hague: Staatsuitgeverij, 1979); Wetenschappelijke Raad voor Regeringsbeleid WRR, *Allochtonenbeleid*, Rapporten aan de Regering 36 (The Hague: Sdu Uitgeverij, 1989). Unfortunately, the length and delimitations of the present text do not allow me to dwell more on this connection.
113 De Vries, "Sub-Politics," 789–91.

the Authority for Consumers and Markets. Both authorities regulated markets without direct instruction from the state, acting instead on the impetus of market actors. This meant that, whilst the government could no longer directly inspect and enforce rules in these (in this case financial) markets, a more diffuse state could regulate and inspect market players, ensuring the possibility of collaboration and the satisfactory functioning of the markets themselves.

The flexibility, creativity, incentives, proliferation of political sites, and mixing of public and private that had featured in Rosanvallon's and Kalma's visions for a diffuse society were carried by a conception of the citizen, not only as the co-author of policy, but also as a collaborator with the state. In this formulation, it may appear as if the planning task—here understood as the integral alignment of means and ends—was lifted either from the realm of central government towards lower administrative levels, or even to citizens themselves, appearing as if collaboration, coordination, and inspection had been delegated to a diffuse state. However, as I will argue below, this is merely an illusion. In reality, on the central level the planning task was simply reiterated, thus attempting to tackle the challenges of multivocal politics laid out by Rosanvallon. Central planning became a matter of designing frameworks in which the collaboration, coordination, and inspection of public and private actors could be executed as efficiently as possible. Such an ideal was sometimes described as *interactive planning*, showing the continuity of this form of planning with the ideal of social planning, both aiming to encourage and foster interaction between citizens, the civil state, and market organisations.[114] However, since the *de facto* emphasis was placed on coordination and commensurability, I would propose to term this planning ideal *regulatory planning*, thus signalling a clear break with the social planning ideal.

The troubles and issues of the disillusioned Left and the ideological lack of a welfare state in the 1980s had, by the end of the decade, taken a more positive turn, imaging new politics beyond the state. At the core of this imagination were two conceptions. First, in keeping with the work of Rosanvallon, there was a focus on the mediating institutions that would allow for a democratic moment in which the people could be represented as equal yet

---

114 Such a characterisation of the new forms of planning is, for example, given in: Andreas Faludi and Arnold Van der Valk, *Rule and Order: Dutch Planning Doctrine in the Twentieth Century* (Dordrecht: Kluwer, 1994).

multivocal. Second, borrowing the language of Schinkel, in the virtualisation of citizenship, the goals of planning—i.e., collaboration, foresight, and rationality—became the *virtù* of the citizen. The citizen was thus conceptualised as a mini-sovereign—a small policymaker and miniature planning agency in one. Both conceptions amounted to a picture of society in which the boundaries between the state, civil society, and the market were becoming increasingly opaque. Policymaking was no longer achieved solely within the machinery of the state, but instead now required a network of organisations and actors across all spheres of society. Such a society of networks, with its mediating institutions and pro-active citizens, was thus embedded in a larger image of a diffuse society.

## 6.5 Sustainable Development

The image of a diffuse society was not wholly in conflict with the received idea of planning in the Netherlands. As has become clear in the previous chapters, Dutch planning had always been keen to stress the individual's preference in the interests of the economy and sought, in different ways, to make a democratic imaginary part of its plans. Yet the new discourse on citizenship and politics beyond the state did present planning with certain challenges, the most glaring being that politics beyond the state seemingly did not have a centre, and thus *central* planning as such seemed like an oxymoron. Furthermore, as some of the means and ends of planning were no longer thought of as part of the state apparatus but virtualised in a conception of citizenship, was planning still to be carried out within the administration of the state? Did this not entail a transfer of tasks from official planning bureaus to active citizens? Were planning bureaus then to be simply regarded as one actor amongst many in a society of networks? More generally, if the state was no longer the initiator of policy and reform, to whom then were planning bureaus to offer their services? If the main task of the state was being an umpire of the market with regulation being delegated to independent administrative authorities, free from central oversight, what then remained to be coordinated on a central level? In short, could the diffuse and regulatory state still be planned?

The following two sections investigate how planning dealt with these challenges by analysing a concrete case in which planning was confronted

with the images and ideas of a diffuse society—or, to be more precise, how the images of a diffuse society were mobilised to denounce more state-oriented forms of planning, and how, in the wake of such an attack, an alternative ideal of planning was formulated. As will be explained in the final section, this alternative ideal of planning could also be seen as a reaction to the predominant experience of time during this period. The question of the future remained vital for the imaginary of a diffuse society, even in the form of citizenship. Even if planning was not to provide images of the future, it still played a crucial role in giving shape to a political future upon which the citizen could act. The case that I want to focus on to illustrate these points revolved around a conflict of interpretation regarding the notion of *sustainable development*. The conflict took place in the late 1980s and early 1990s between the Ministry of Public Housing, Spatial Planning and Environmental protection (VROM), and the Ministry of Economic Affairs.

At stake in the conflict between the ministries of VROM and Economic Affairs was the National Policy Plan for the Environment (*Nationaal Milieubeleidsplan*, NMP), a new environmental policy strategy which started its development in 1986. Intended as an integrative strategic agenda for all government policies, the plan indicated the broad outlines of policy up to the year 2015 and stipulated all of the environmental policies for the coming four years.[115] The NMP was not the first integrative environmental policy agenda produced by the Dutch state, yet formed a new paradigm—introducing completely new governing concepts and strategies. A brief comparison between the NMP and its predecessors will illuminate this point. Following increased awareness of urgent environmental issues after the publication of the *Limits to Growth* (1972) report, the first measures to clean up the environment started in the mid-1970s. Far from a integrative agenda, these measures were largely ad-hoc in nature, not least as they were implemented by three different ministries and focussed mainly on persuading businesses to remove the pollution they left in the environment.[116]

In 1982, in an attempt to bring all environmental policies under one

---

115 "Globale NMP Chronologie", memorandum from the 24th of August 1990, found in: Nationaal Archief, Den Haag, Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer: Nationaal Milieubeleidsplan, entry number 2.17.10, inventory number: 70. Hereafter abreviated as: NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10.

116 Sjoerd Keulen, *Monumenten van Beleid: De wisselwerking tussen Nederlands rijksoverheidsbeleid, sociale wetenschappen en politieke cultuur, 1945-2002* (Hilversum: Verloren, 2014), 219.

roof, the ministry of VROM was founded. The task of writing the first integrative agenda came down to its first minister, Pieter Winsemius, who developed an overarching strategy based on two tenants: covenants and internalisation (*verinnerlijking*). Covenants were indented as voluntary agreements between industries promising to reduce emissions.

"Internalisation" denoted an awareness campaign target at private actors. The idea was that citizens and businesses alike would reduce their pollution when they started to care for the environment out some sense of civic duty.[117] Guiding each of these tenants was the metaphor of self-organising systems. Winsemius imagined each sector of industry as its own sub-system of production and subsequent pollution removal. His favourite metaphor was to see each industry as a self-contained bubble, as he explained in one of his speeches:

> The idea is extremely simple; we place an imaginary bell jar over a number of sources and determine what the total residual emissions may be. We leave it to the entrepreneurs under the bell jar about how they can best achieve this.[118]

The bubble concept was attractive for Winsemius because industry, fearing too much government interference, had demanded less rules that were easier to follow. This industry friendly approach changed, however, when Winsemius was succeeded by Ed Nijpels as minister of VROM in 1986. Two new and urgent problems most likely inspired Nijpels to drastically alter the overreaching policy strategy of VROM in the NMP: global warming and the hole in the ozone layer. Although these issues had been known for a longer period, the main focus of Dutch environmental policy had, up to that point, been the dumping of toxic waste and the pollution of the soil and drinking water.[119] However, reports from the National Health Council gradually shifted the attention of policymakers to carbon dioxide ($CO_2$) emissions and the resultant greenhouse effect, and the hole in the ozone layer caused by chlo-

---

117 Jan Van Tatenhove, "Milieubeleid onder Dak? Beleidsvoeringsprocessen in het Nederlandse milieubeleid in de periode 1970-1990; nader uitgewerkt voor de Gelderse Vallei" (PhD thesis, Wageningen, Wageningen University and Research, 1993), 29.
118 Keulen, *Monumenten van Beleid*, 220.
119 Keulen, 180.

rofluorocarbons (CFCs).[120] In 1987, the National Agency for Public Health and Environment (*Rijksinstituut voor Volksgezondheid en Milieu*, RIVM) published their *Concerns for Tomorrow* report, which put these issues forcefully on the political agenda. The urgency of these issues was immediately felt, and members of parliament rushed to express how shocked they were by the report.[121] A second development that shaped the development process of the NMP was the publication of *Our Common Future* (1987) by the United Nations. Also known as the Brundtland report, the report introduced the notion of *sustainable development* as the overarching goal of development strategies. With the government's provisional embrace of its core conclusions, VROM decided to make the central notion of the report into the core philosophical principle of the NMP.[122] This new focus of environmental policy led to the development of very strategies in the NMP compared with Winsemius agenda.

In order to show the combined urgency of the greenhouse effect and the hole in the ozone layer, the RIVM had, with the help of an employee called Kees Zoeteman, developed the so-called *scaling model* (see figure 6.2).[123] Inspired by the cybernetic thinking of James Lovelock and Lynn Margulis' Gaia hypothesis, which took the earth itself to be a complex and self-organising system, Zoeteman stressed the interconnectedness of different spheres. Environmental problems were dependent on a complex set of factors that were at once both global and local. Moreover, environmental problems could not be seen in isolation as different issues fed into each other, and thus local problems could have an impact on a global scale and vice versa. For example, the $CO_2$ emitted by one industry would not only affect the environment of a completely different sector, but also added to the greenhouse effect on a global scale. In short, the model presented the environment as a system of interconnected loops.[124] Soon after the publication of *Concerns for Tomorrow*, the VROM hired Zoeteman to make this scaling model the starting

120 Wijnand Duyvendak, *Het Groene Optimisme: Het Drama van 25 Jaar klimaatpolitiek* (Amsterdam: Bert Bakker, 2011), 27.

121 Duyvendak, 39.

122 "Regeringsstandpunt over het rapport van de World Commission on Environment and Development" Kamerstukken II, 1987-1988, 20 298, no. 2

123 Keulen, *Monumenten van Beleid*, 220; Kees Zoeteman, *Gaiasophy: An Approach to Ecology* (Hudson, N.Y.: Lindisfarne Press, 1991); Rijksinstituut voor Volksgezondheid en Milieu RIVM, *Zorgen voor morgen: Nationale milieuverkenning 1985-2010* (Alphen aan den Rijn: Samsam H.D. Tjeenk Willink, 1988), 4.
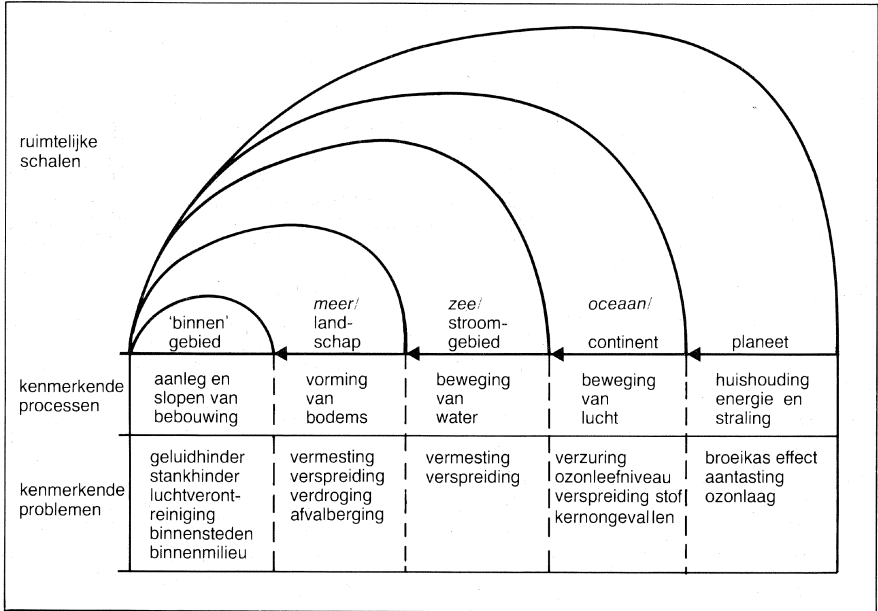
124 RIVM, *Zorgen voor morgen*, 5.

| | 'binnen' gebied | meer/ land- schap | zee/ stroom- gebied | oceaan/ continent | planeet |
|---|---|---|---|---|---|
| ruimtelijke schalen | | | | | |
| kenmerkende processen | aanleg en slopen van bebouwing | vorming van bodems | beweging van water | beweging van lucht | huishouding energie en straling |
| kenmerkende problemen | geluidhinder stankhinder luchtveront- reiniging binnensteden binnenmilieu | vermesting verspreiding verdroging afvalberging | vermesting verspreiding | verzuring ozonleefniveau verspreiding stof kernongevallen | broeikas effect aantasting ozonlaag |

**Figure 6.2 The Scaling Model, from: Rijksinstituut voor Volksgezondheid en Milieu (RIVM),** *Zorgen Voor Morgen* **(Alphen aan den Rijn: Samsom H.D. Tjeenk Willink, 1988)**
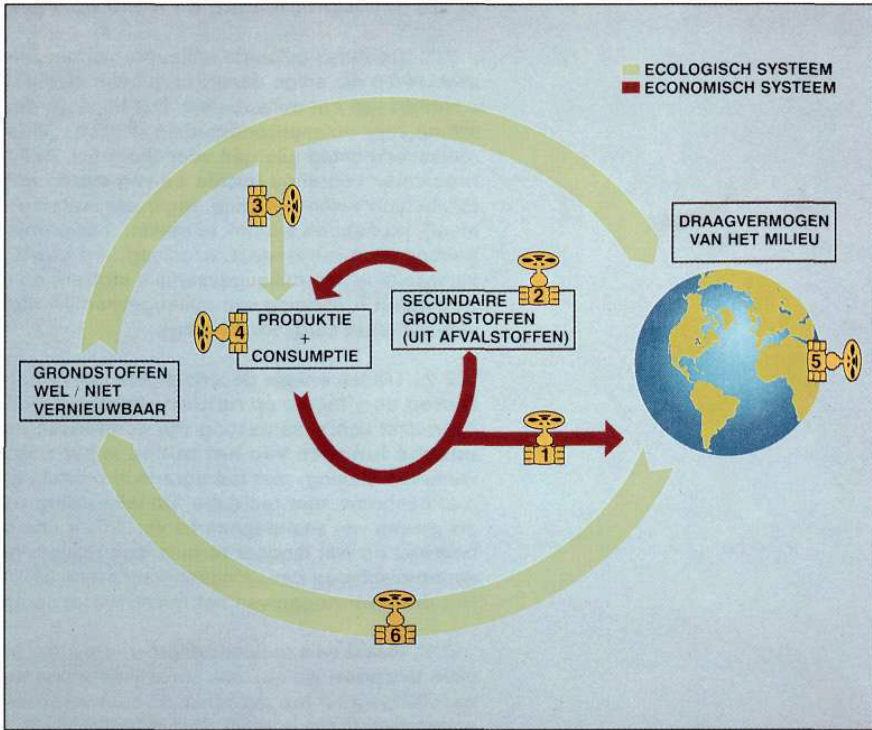
**Figure 6.3 The Valve Model, from: 'Nationaal Milieubeleidsplan' Kamer-stukken II, 1988-1989, 21 137, no. 2, 62**

point of the strategies laid out in the NMP.

The Brundtland report had famously defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".[125] This meant that economic growth in the present should not have a negative effect on the living conditions of future generations. However, the definition was also famously vague, not least as what exactly the needs of future generations might be was quite obviously not necessarily the same as those of the present. The interpretation that VROM applied to this definition was that future generations should not experience the destabilising effects of current economic development. In Zoeteman's cybernetic terms, current emissions should not be allowed to throw the planetary system out of balance, disrupting all its subsystems. Operationalising sustainable development, the NMP aimed at the self-containment of loops—a "closing of cycles" (*het sluiten van kringlopen*)—meaning pollution should not end up in the larger cycles that made up the earth's system, but be contained in the production and waste management processes of the industries concerned (see figure 6.2).[126] If the government wanted to close cycles of pollution and emissions, it was necessary to keep track of all the pollution industry produced and, importantly, where it ended up. Consequently, the administrators had to know the levels of emission and waste, and where in the eco-system these pollutions ended up—the NMP spoke about the "currents of emissions". To this end, the NMP developed an environmental bookkeeping system which, next to its economic accounting framework, was intended keep track of all the polluting activities of businesses and individuals. Here, the VROM saw the advantages offered by the introduction of personal computers, and developed spreadsheet software for all businesses to use in their environmental bookkeeping system.[127] It was their aim to make pollution accounting just as natural as national accounting was for the Dutch government.

It cannot be over-stressed how different Winsemius' bubble concept was from that of Nijpels' NMP approach. Winsemius' aim—the self-containment of polluting subsystems—was literally impossible in the scaling model that the NMP employed. In terms of planning, the heavy reliance on cybernetics

125  World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987), 8.

126  "Nationaal Milieubeleidsplan" Kamerstukken II, 1988-1989, 21 137, no. 2, 12.

127  Rob Maas, "A Choice of Technological Futures," *Milieu* 1989, no. 4 (1989): 120–24.

made the NMP a throwback to the social planning models of the 1960s and 1970s. However, one thing remained very clear to the drafters of the NMP, namely that leaving responsibility for the reduction of pollution to industry did too little to avert the looming threat posed by $CO_2$ and CFCs. Instead, the government needed to take a leading role in environmental policy, not only by designing the overall framework, but also by taking overarching decisions.[128] Private actors had influence on these decisions and stakeholder meetings remained part of the NMP, but it was the government that had to manage the system.

VROM saw the emotional reactions of members of parliament as evidence of broad public support for drastic environmental measures. Naively, they had not counted on opposition from within the government services themselves. Consequently, VROM was unprepared for the outright hostility it received from the Ministry of Economic Affairs, when it presented its plans in December 1987.[129] The Ministry of Economic Affairs feared that the far-reaching proposals of the NMP would prove to be too much of a financial strain on Dutch industry. In 1987, the Dutch economy was only just showing signs of recovery after the downturn of the mid-1970s, and the ministry's policymakers did not want to risk the still perilous recovery.[130] Another issue was that the ambitious environmental planning agenda seemed diametrically opposed to the programme of fiscal restraint (as developed in the 1970s, see previous chapter) that policymakers had only recently managed to institutionalise in the Ministries of Finance and Economic Affairs.[131]

A telling incident emphasising the clashing visions of the two ministries occurred in May 1987. In a stakeholder meeting with industry leaders, VROM had presented part of their NMP plan for feedback. In order "to let the target groups tackle some dilemmas involved in environmental policy",

---

128 Duyvendak, *Het Groene Optimisme*, 50.

129 "Verslag gesprek met Kolkena (EZ)" by Ad Vollenbergh for the management team of the NMP, December 12, 1987. NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10, inv.nr. 46.

130 Duyvendak, *Het Groene Optimisme*, 43. 'Overleg VROM en EZ, 9 juni 1988' minutes, found in: NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10, inv. nr. 47.

131 The previous chapter discussed the initial phase of this institutionalisation. For the later developments, see: Corina Hendriks, "The Story behind the Dutch Model: Consensual Politics of Wage Restraint", PhD thesis (Amsterdam, University of Amsterdam, 2010); Wimar Bolhuis, *De Rekenmeesters van de Politiek: De Doorberekening van de Verkiezingsprogramma's van Het Cpb* (Amsterdam: Van Gennep, 2017), 32–35.

the VROM had developed some futurist discussion scenarios.[132] Against two axes, with the vertical axe offering a central role for either government or private organisation, and the horizontal axe presenting the trade-off between the environment and the economy, VROM presented four scenarios. The issue was that only the scenario with a strong role for the state seemed viable for achieving the aims of the NMP. However, this message was not well received by the industry leaders present. Following the meeting, the Royal Dutch Shell CEO Peter Vogtländer angrily phoned the secretaries-generals of VROM and Economic Affairs to complain about his treatment in the stakeholder meeting.[133]

The conflict between the two ministries resulted in long and strained negotiations on the content of the NMP. On the insistence of Economic Affairs, the CPB was given a large role in these negotiations, even though the CPB had immense trouble with the proposals of the draft version of NMP. As explained in the fourth chapter, the CPB had taken a very macroeconomic approach to environmental issues, and consequently found the proposals for environmental accounting difficult to accept. In addition, the CPB was keen to point out that the NMP measures would only have an effect if the other industrialised nations adopted similar measures—a scenario the CPB thought to be unlikely. The Dutch government held little influence over the other nations ("we're but a small nation"), they argued.[134] The risks meanwhile were obvious: Was the Netherlands willing to become less competitive when other economies were not, thus undermining the national economy?

The CPB feared that committing too much to a specific strategy and long-term environmental planning—especially with measures that were going to directly, or indirectly, alter the production process—would make the Netherlands less flexible to adjust to future unforeseen circumstances. The image of the future the CPB was propagating was very different from that of the VROM. Where the NMP contained a vision in which the state had to actively intervene in the loops of the environmental system to counter the negative effects of pollution on future generations, the CPB presented—in line with the discussion on the ideology of the welfare state of the 1980s and

132 "Verslag NMP-workshop te Ommen 20, 21 en 22 mei 1987", NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10, inv.nr. 11.

133 "Overzicht geschiedenis en doel NMP en NMP plus", NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10, inv.nr. 37.

134 Memorandum from Rob Maas to Paul de Jongh van 25 October 1988, NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10, inv.nr. 59.

citizenship of the 1990s—an uncertain, complex, and global future, in which national governments could no longer make a difference. It was, in short, a clash of future images and a clash of planning ideals, between the older social planning ideal and the emerging regulatory ideal.

In November of 1988, tensions regarding the development of the NMP between the VROM and the Ministry of Economic Affairs came to a head, so much so in fact that, over the course of the following year, the secretary-general of Economic Affairs, Frans Rutten (famous for his neoliberal ideas, see previous chapter), started a vendetta against the NMP akin to a military campaign.[135] Mobilising an alliance with the Ministries of Finance, Agriculture and Fisheries, and Transport and Public Works against the VROM, Rutten was hoping to reduce support for the NMP to such an extent that it would be effectively dead when it was finally presented to parliament.[136] Eventually, negotiations over the NMP became deadlocked and the Ministry of General Affairs had to intervene to advance the plan any further.

Prime Minister Ruud Lubbers personally mediated between the ministries.[137] This was ultimately to the benefit of VROM, since Lubbers had become convinced of the need for more stringent environmental measures by reading the RIVM's *The Concerns of Tomorrow* and a draft version of the NMP.[138] Lubbers' solution to solidify the NMP measures against the wishes of the Ministry of Economic Affairs was a proposal to raise levies on commuter traffic, petrol, and LPG.[139] He pushed his proposal by arguing that "we are not able to get anywhere if we even can't find agreement on a simple levy."[140] In April of 1989, when the NMP was finally presented to parliament, albeit in a stripped-down version, the reaction was not what Lubbers had hoped for. His coalition partner the People's Party for Freedom and Democracy (VVD)—ironically the party of which Minister Nijpels was a member—were wholly opposed to the plans of the NMP, especially the levies on fuel and commuter traffic. Lubbers was, however, unwilling to bow to the

---

135 Memorandum from Paul Hofhuis to the DGM, 23 december 1988, NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10, inv.nr. 47.

136 Memorandum from Paul de Jongh to the DGM, 24 January 1989, NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10, inv.nr. 47.

137 "Globale NMP Chronologie", NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10, inv.nr. 70.

138 Keulen, *Monumenten van Beleid*, 207.

139 "Kort verslag bespreking ministers" 22 February 1989, NL-HaNA, VROM / Nationaal Milieubeleidsplan, 2.17.10, inv.nr. 59.

140 Ibid

VVD's demands for scrapping these measures. In reaction, the VDD withdrew its confidence in the cabinet and the cabinet fell on the night of the 2nd of May 1989.[141]

This dramatic turn of events almost signalled the end of the NMP. In the aftermath of the fall of the cabinet, both VROM and the RIVM realised that the planning strategy of the NMP was out of date. The greenhouse effect and the hole in the ozone layer had confronted policymakers with such an urgent and radical future that a strong state seemed the only solution. However, for many it was just another doom perspective, the type of which society had grown tired. When confronted earlier with such perspectives, Winsemius had proclaimed: "not on my watch, it makes you sick, sick. True defeatism…"[142] The NMP had presented a global future, but the conviction had taken hold that such a future could no longer be managed in an overarching system.

## 6.6 Subjective Valuations and Institutions

Ultimately, the fall of Lubbers' cabinet did not mean the end of the NMP. After the elections, Lubbers became prime minister once more, this time forming a cabinet with the Labour Party instead of the VVD. It was decided that the NMP, which due to the strained negotiation process was still rather sketchy in parts, would receive an update, the so-called NMP-plus, which was completed in June 1990.[143] Moreover, the cabinet stuck to the original intent of the NMP as a periodical policy document, returning once every four years, each time detailing the policies for the next period. Work on the second NMP thus started immediately after the NMP-plus was finished. However, it was clear to VROM that the definition of sustainable development offered in the first NMP had failed to capture the administrative and political imagination, and that a new unifying vision on environmental policy was necessary. The conflict between VROM and the Ministry of Economic Affairs had shown that the core problem sustainable development was supposed to solve—the tension between economic growth and a clean

141  Duyvendak, *Het Groene Optimisme*, 45; Keulen, *Monumenten van Beleid*, 225–26.
142  Cited in: Keulen, *Monumenten van Beleid*, 203.
143  'Nationaal Milieubeleidsplan' Kamerstuk 14 June 1990, Tweede Kamer der Staten-Generaal, 1989-1990, 21137, nr. 20.

environment—continued to haunt politics. Everyone seemingly agreed that the economy and the environment were not fundamentally at odds with each other, but how the goals of economic and environmental policy could be harmonised remained fiercely contested. A new definition of "sustainable" was going to be necessary to overcome this deadlock. As I argue in the following section, this new definition, in line with discussions on the ideology of the 1980s welfare state, deemphasised the primacy of the state in environmental policies and instead placed all of the focus on private initiative, resulting in the diffusion of state and private tasks.

The task of finding a new definition of sustainable development was assigned to a series of advisory councils in the first half of the 1990s. The WRR published two reports on sustainable development and environmental policy in 1992 and 1994, whilst the Central Council for Environmental Hygiene (*Centrale Raad voor de Milieuhygiëne*, CRMH) organised a series of seminars on the issue in 1993. The CPB followed suit with a report in 1996.[144] All these reports had a rather consistent political agenda, namely denouncing the NMP's original interpretation of sustainable development and replacing it with a more industrial and market-friendly alternative. It is in these reports that the new ideal of citizenship and regulatory planning (as discussed in section 6.4) gained substance in more concrete policy proposals. As I will argue in the next section, this consolidation and reinterpretation of sustainable development also entailed the development of a planning ideal that could connect the space of experience of citizenship with a long-term outlook for the future.

The relatively consistent message of the three independent advisory councils was no coincidence. In 1990, Rutten finally left his post as secretary-general of the Ministry of Economic Affairs and became president of the WRR. The council had already started working on a report in reaction to the NMP, even when the plan was still under development.[145] However, with

---

144 Wetenschappelijke Raad voor Regeringsbeleid WRR, *Milieubeleid: strategie, instrumenten en handhaafbaarheid*, Rapporten aan de Regering 41 (The Hague: SDU Uitgeveri, 1992); Wetenschappelijke Raad voor Regeringsbeleid WRR, *Duurzame risico's: een blijvend gegeven*, Rapporten aan de Regering 44 (The Hague: SDU Uitgeveri, 1994); Kenneth I. Hanf, Arthur Ringeling, and Katrien Temeer, *Milieubeleid en een veranderende overheid*, Centrale Raad voor de Milieuhygiëne (Zoetermeer: Distributiecentrum VROM, 1993); Centraal Planbureau CPB, *Economie en milieu: op zoek naar duurzaamheid* (The Hague: SDU Uitgeveri, 1996).

145 "Verslag van de 12e vergadering van de WRR in 1991" 9 July 1991, Nationaal Archief, Den Haag, Wetenschappelijke Raad voor het Regeringsbeleid, entry number

Rutten's appointment, the report took a new direction. Staff were re-shuffled and the task of writing the core chapters fell to the Rotterdam-based economist, Dick Wolfson. Wolfson moved away from the previously macroeconomic focus of the report towards a public choice method, much to the dismay of other staff members.[146] Furthermore, following an intervention from Rutten, the ex-CEO of Shell, Hein Hooykaas, became a member of the WRR and soon became involved in the drafting of the report, further ensuring its industry-friendly character.[147]

With regard to the CRMH, the matter was a little more complex. The council consisted of scientists, representatives of trade unions, employer organisations, and environmental organisations. Consequently, its advisory reports were a synthesis of multiple opinions. However, the president of the CRMH was Leendert Ginjaar, a member of the VDD who played a crucial role in the fall of the second cabinet of Lubbers.[148] Ginjaar's agenda is more clearly visible in the external research commissioned by the council, as neoliberal economists such as Willem Drees and Andries Nentjes produced very pro-market recommendations.[149] The CPB, meanwhile, attempting to solve the issues of the conflicting images futures presented by the NMP and the WRR, followed the recommendations of the WRR reports . In this sense, these reports can be read as a continuation of the conflict between VROM and the Ministry of Economic Affairs, albeit by different means.

The central issue in these reports was the democratic support of the environmental policies that the NMP proposed. However, democratic support here was not understood as the legitimation that parliament could give environmental policies—as shown in the previous section, VROM had all the reason to believe that members of parliament supported firmer measures.

---

2.03.07, inventory number: 51.

146  "Verslag Stafvergadering" 5 November 1990, NL-HaNA, WRR, 2.03.07, inv.nr. 66.

147  During the same period, Shell CEO Hooykaas supplied funds to the climate sceptic Frits Böttcher with the explicit goal of disseminating narratives denouncing the greenhouse effect as a hoax. See: Alexander Beunder et al., "Hoe Frits Böttcher Met Steun van Tientallen Bedrijven de Basis Legde Voor de Klimaatscepsis in Nederland," *De Volkskrant*, February 22, 2020.

148  Duyvendak, *Het Groene Optimisme*, 45; Keulen, *Monumenten van Beleid*, 225–26.

149  See: "Financiën", by W. Drees, found in Nationaal Archief, Den Haag, Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer: Centrale Raden voor de Milieuhygiëne, entry number 2.17.08, inventory number: 537; "Economie", by A. Nentjes, found in: ibid, inv.nr. 543

Instead, democratic support was the individual willingness of businesses and citizens to adhere to the policies. The advisory councils stated their concern that such support was lacking and would thus undermine the effectiveness of the environmental policies.[150] This fear was intimately connected with the debate on the ideology of the welfare state (discussed in section 5.2). The idea of public opinion had already been radically individualised in the 1950s, when it was conceptualised as an aggregate of individual preferences.[151] In the 1960s, social planning had put more emphasis on deliberation and feedback loops rather than aggregation in order to find a unified public opinion. Yet as Rosanvallon's critique attests, the idea that public opinion could be represented as a unity of state (or parliament) became highly suspect in the 1990s. Multivocal conceptions of public opinion came into vogue and raised the question of which mediating institutions could represent the people as equal yet plural. The above-mentioned reports attempted to develop such an institution, pursuing a conception of public opinion in which individual preferences could never be aggregated.

For example, the CRMH report *Environmental Policy and a Changing Administration* (1993) linked the history of the welfare state to the future of environmental policy by producing a futurist-type image of the future. Using scenario techniques on the threefold axis of private-public, central-decentral, and political-bureaucratic, they presented four future scenarios: a strong state, a technocratic state, a marginal state, and an interwoven state.[152] Although each scenario had its specific advantages and disadvantages, the strong-state scenario was particularly unwelcome. The problem with the strong state, as proposed in the original NMP, the report contended, was that "legitimating its objectives is not the strongest feature of a strong state."[153] It was a clear reference to the discussion on the ideology of the welfare state from the previous decade. The state had lost the ideology (or symbolic order) to enforce laws without the explicit consent of its citizens—that is, if it went against their personal preferences. Without an external source of ideology or legitimacy, citizens were unlikely to comply with the decisions of the state. Consequently, the report argued, the willingness of private actors to

---

150 Keulen, *Monumenten van Beleid*, 180.
151 J.A.W. Gunn, "'Public Opinion' in Modern Political Science," in *Political Science in History: Research Programs and Political Traditions*, ed. James Farr, John S. Dryzek, and Robert J. Leonard (Cambridge, UK: Cambridge University Press, 1995), 109–22.
152 Hanf, Ringeling, and Temeer, *Milieubeleid en een veranderende overheid*, 50.
153 Hanf, Ringeling, and Temeer, 53.

comply with proposed measures resulted in an extra factor in the uncertainty of environmental policy.[154]

The WRR report *Sustainable Risks* (1994) framed the same issue as a problem of individual valuation. The NMP, the WRR argued, had failed to discuss the different political definitions of the environment. How far one was willing to comply with environmental regulation was largely dependent on the personal ideological outlook and values one adhered to with regard to the environmental. For instance, if one considered the environment unmanageable by the nation-state, sustainable development looked different to when one considered it manageable. The two factors the WRR presented in this personal valuation, were (a) how far one believed in the malleability of society leading institutions; and (b) how far one identified with the larger groups of society (for an example see figure 6.4).[155] Each of these beliefs constituted an ideal individual citizen valuation of environmental policy, forming an imaginary to which to adhere, and each valuation gave a different assessment of the uncertainties and risks involved. If, for example, one did not wish for a society governed by formalised and hierarchical relationships and strongly identified with one's own society, one would assess top-down environmental measures as highly risky, whilst more community driven policies as less risky (figure 6.4, lower-right cell). When planning agencies made assessments of environmental policy, they not only had to assess the objective uncertainty and risk of the policy achieving its goal, but also integrate the individual subjective valuations of those uncertainties and risks.[156]

The scientific apparatus needed to incorporate individual valuations of uncertainty and risks into policy risk-assessments had been the subject of the WRR's earlier report, entitled *Environmental Policy: Strategy, Tools and Enforceability* (1992) and developed in tandem with the 1994 report *Sustainable Risks*. The support of private actors for the goals of environmental policy was conceptualised as the preference for a clean and emission-free environment. Creating more support meant that actors would give a higher ranking to their environmental preferences.[157] For example, going to work by train instead of car could be more expensive and time-consuming, but actors were willing to take this alternative if it satisfied their preference for a clean

---

154  Hanf, Ringeling, and Temeer, 72.
155  WRR, *Duurzame risico's*, 21–22.
156  WRR, 42.
157  WRR, *Milieubeleid*, 162.

GROUP = degree to which individual feels him/herself a member of the group
GRID = degree to which formal relationships between group-members exist
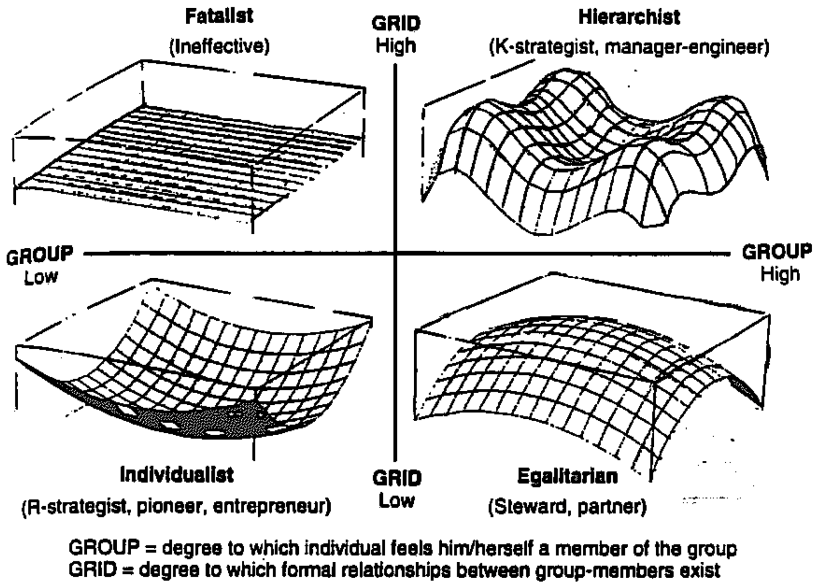
**Figure 6.4** "Four Different Attitudes in Relation to Nature and the Associated Types of Social Behaviour", from: Michiel Schwarz & Michael Thompson. *Divided We Stand: Redefining Politics, Technology, and Social Choice.* (Pennsylvania: University of Pennsylvania Press 1990)

environment. The challenge for an effective environmental policy was therefore framed as a question of how it could change the preferences of actors.

Traditionally, neoclassical theory in its behaviouristic guise said little about actors changing their preferences. More cognitive approaches would, in contrast, argue that actors would revise their preferences when confronted with specific constraints.[158] The WRR report, in particular, cited the work of the Norwegian political philosopher John Elster. Elster spoke about "adaptive preferences"—those that come about in a process that constantly undermines specific choices.[159] These processes take the form of a series of institutions, here understood patterns of behaviour, that put constraints on the actions of agents. However, these institutes are just as easily the consequences of specific preferences. Agent and environment are thus caught in a process akin to evolutionary development in which organisms are shaped by their environment, but also give shape to their surroundings. Individual choices were shaped by a choice framework: a set of institutes that constrain (or determine) the possible actions. The influence of such frameworks on individual choices could go very far, even leading to pathological behaviour, for example, in the case of cognitive dissonance or the supposed workings of the so-called "Stockholm Syndrome" in which hostages form an emotional connection to their captors.[160] The inherent rationality of the human actor, presumed in the rational choice framework applied by Elster, was thus temporarily suppressed, or distorted by particular choice frameworks. For Elster, therefore, public choice should not be seen as an empirical theory (as Hans Daudt and Theo Stevers would have done in the previous chapter), but rather as a normative theory. Thus, policy should aim to provide choice frameworks that would allow individuals to form preferences that would not cause self-abnegation.[161] In other words, rational behaviour was not to be presumed in each individual, as individuals can delude themselves into acting irrationally, but remained something towards which to strive in a just society.

---

158  Jon Elster, *The Cement of Society: A Survey of Social Order* (Cambridge, UK: Cambridge University Press, 1989).

159  Jon Elster, *Sour Grapes: Sour Studies in the Subversion of Rationality* (Cambridge, UK: Cambridge University Press, 1983), 109.

160  Elster, 110.

161  This point is made in: Eric Schliesser, "Jon Elster, Sour Grapes," in *The Oxford Handbook of Classics in Contemporary Political Theory*, ed. Jacob T. Levy (Oxford: Oxford University Press, 2018).

The implication of this approach on environmental policymaking was twofold: Policy had to strive for choice frameworks that allowed private actors to make choices as rationally as possible, and furthermore, policy should strive to provide choice frameworks that stimulated actors to strive for higher ranking environmental preferences. Both goals could be united by providing the right information to the actors, letting them understand the urgency of environmental policy, but also by intelligently designing choice frameworks in such a way that environmentally friendly choice was not disincentivised. Good choice design (today known as *nudging*) had to provide the ability for individual agents to gain insight into the risk connected to each possibility so that they could make the appropriate assessment regarding their choice.[162] Broadly speaking, this was the very same idea that the Deetman report had promoted in 1990, in which citizens had to become their own micro-planning agency in assessing risks. To illustrate this with an example from the WRR report, commuting by car was an attractive option if the choice was framed in terms of money, speed, and comfort. However, the option became less attractive if the choice also included the long-term effects of commuting by car. If these risks were clearly presented in the individual's choice to go to work either by car or public transport, the decision could be made more "rational" and perhaps also more environmentally friendly.[163]

There was, however, a caveat in designing such individually oriented policies. Good choice design entailed that government policies would be stable over extended periods of time. Only then was it possible for individual agents to make proper long-term risk assessments of their choices.[164] Dutch planning could thus be of help to government policy by continuing to provide a stable long-term framework (as analysed in the previous two chapters). This reaffirmed that government policies could only succeed with planning. Consequently, state planning was thus still instrumental to the possibility of individual "planning". In such a conception, the NMP's proposal to scrap the tax deduction on home-work traversal by car, which had led to the fall of the second Lubber cabinet, was taken as an example of how the absence of

---

162 On nudging as choice design (or choice architecture) and its relation to behavioural economics, see: Erik Angner, *A Course in Behavioral Economics*, 2nd ed. (London: Palgrave Macmillan, 2016), chap. 12.

163 WRR, *Duurzame risico's*, 170.

164 Herman Volleberg, "Betwistbare (On)Zekerheid. Het Nut van Geobjectiveerde Duurzame Risico's," *Tijdschrift Voor Politieke Ekonomie* 18, no. 4 (1995): 90; Hanf, Ringeling, and Temeer, *Milieubeleid en een veranderende overheid*, 58.

long-term outlooks had negative effects.[165] The tax deduction had only been introduced a couple of years earlier, causing citizens and companies to invest more in lease cars and car ownership. Scrapping the measures would leave a negative strain on consumers and companies alike, for if employees were to take out loans to invest in a car with the expectation of future cost-saving benefits of tax deduction, scrapping that deduction would leave a considerable gap in the long-term payment of the car, whilst the employees might not as easily get their investment back. Volatile government policy consequently undermined the personal risk assessments of private actors. To prevent such negative effects, fiscal measures had to be planned in the long term and should not be adjusted to meet the needs of other short-term ends.

From the tasks the CPB was already performing, it was clear that setting out a long-term stable (mainly fiscal) framework that individual preferences could overtime adopt, would fall on their shoulders. In their *Economy and Environment: Looking for Sustainability* (1996), the CPB proposed a new definition of sustainable development: that the satisfaction of individual preferences in the present cannot be of such nature that they would undermine the possibility of the satisfaction of preferences of future generations. Using welfare models, similar in nature as those developed by Tinbergen in the 1950s (see section 3.8), the CPB argued that the problem with establishing an environmental norm in the present was that the individual preferences of future generations were highly dependent on the development of society and technology. In a global and uncertain future, it was hard to predict how these might develop.[166] For example, driving a car could be highly preferred in the present, but if technology were to replace the car with something better, this preference would disappear. Placing restrictions on growth in the present could prove counterproductive if due to technological advancement, economic growth proved less taxing on the environment in the future.[167] The conclusion the CPB drew from this issue was that the future was too complex and uncertain for any strict state norm to encompass. Direct state interference would thus be highly ineffective. The government could only implement frameworks for the gradual adaptation of preferences to new situation.

Following the recommendations of the WRR, the CPB sketched how

---

165  WRR, *Milieubeleid*, 169.
166  CPB, *Economie en milieu*, 31.
167  CPB, 37.

such an adaptive framework could look like.[168] A prominent option explored in the report was the distribution of state property rights. An example cited was the selling of state-owned ground on the Utrecht Hill Ridge to a private organisation—the *Society for Preservation of Nature Monuments in the Netherlands*. As the CPB report remarks, not only did selling the property rights mean that the use of the forested area was more dependent on the valuation that private actors attributed to it, it was also a safeguard that bound the municipality to its decision to designate the ground for leisure purposes, ensuring they would be unable to change their plans if, for example, housing shortages would pressure them to act otherwise.[169] Such reasoning showed strong similarities with the suggestion of the Deetman report to transfer state functions to independent administrative authorities that could no longer be directly controlled by the government. Private actors could enact public services, such as the maintenance of scenic areas, but only those regulated by law. In such a case, the law not primarily enforced by the state (they only had to protect property rights), but by independent (semi) public administrations.

The new definitions of sustainable development put forward by the WRR, the CPB, and the CRMH made a collective good—the environment—into something individual. The state could no longer establish a norm for the evaluation and preservation of the environment, thus creating more room for market-based valuations. Like the neoliberal proposals for restraint from the 1970s, state actors were bound to long-term strategies and environmental policies had to be solved by civil society. Unlike those earlier proposals, private actors had to enact public services, undoing the strict division between civil society and state tasks. Consequently, bureaucracy no longer needed to be shielded from interest groups. On the surface, the state's tasks became minimal, having only to provide long-term outlooks. In the background, however, state planning had the weighty responsibility to design stable frameworks that would allow collaboration between private and public actors, implicitly nudging them towards more environmentally friendly alternatives.

---

168  CPB, 46.
169  CPB, 50.

## 6.7 The Long and Stable Horizon of Governance

The visions contained in multiple reports by government advisory councils continued the neoliberal conception of relegating the politics of future images to civil society. The ideas of futurism in which the production of individual future images fostered political agency were continued. As the WRR report *Sustainable Risks* had argued, the preferences of private actors were bound to prognoses. Individual valuations were dependent on visions of how society would change in the future and who precisely the designated actor of history was. In the regulatory planning ideal, the future was further democratised as each individual could perform planning tasks. As with previous social planning ideals, individual future images had to take the lead with regard to how society might change in the future. However, a collective vision was no longer possible and a form of state planning that brought individual visions together was considered unwanted. However, these individual assessments were only meaningful when set against the background of stable long-term institutional arrangements. As I will argue in this final section, this stable institutional framework that state planning had to provide contained a conceptualisation of historicity as well.

One of the main arguments in the WRR and CPB reports was that direct environmental regulations enforced by the state was at best unwanted, and at worst, impossible. As argued in the previous section, it was thought that the diversity of individual valuation made the likelihood of adherence to state laws too uncertain. If regulation clashed too much with personal convictions, private actors would simply seek ways to circumvent laws, for example through illegal dumping. These arguments had some historical precedent. A series of well-documented cases in the Dutch press had given the impression that industries could ignore environmental regulation whilst evading punishment. For example, in 1981, it was revealed that the recycling company EMK was illegally dumping waste in the Hollandsche IJssel river. In the aftermath of the affair, the minister responsible, Leendert Ginjaar (who later led the CRMH), concluded that the regulation placed too much of a financial strain on companies and therefore no fines had to be paid.[170] In the broader discussion on the ideology of the welfare state, analysed in the first two sections of this chapter, the issue of regulation was framed in the press as an issue of (the lack of) legitimacy and support (*draagvlak*).[171]

---

170  Keulen, *Monumenten van Beleid*, 180.
171  Hanf, Ringeling, and Temeer, *Milieubeleid en een veranderende overheid*.

However, as the earlier CPB criticism of the NMP attests, there was an-other reason why more direct state measures were likely to fail. The CPB had discredited the NMP's future outlook by contrasting it with their own global (and uncertain) outlook on the future. The world had become too intercon-nected for state policy to make a difference. Moreover, shifting global rela-tionships would probably pressure states into constantly changing course if they adhered to more stringent and less flexible regulations. The WRR report on urban development had already stressed in 1990 that private actors were more likely to have the flexibility to adapt to these changing circumstances and seize the opportunities they provided.

Such a contingent vision of the future seemed, superficially, to clash with the CPB's task as assigned in the regulatory planning ideal—namely that of providing a stable choice-architecture. As explained above, collaborations between private and public actors were more likely to succeed if they based their collaborations on just such a stable institutional infrastructure. More-over, citizens could not be expected to make reliable prognoses of the future if a more powerful actor, the state, could drastically reshape the underlying conditions of those prognoses, as the example of the fuel levy in the WRR report clearly demonstrated. How then was planning expected to adhere to an unstable and contingent future, whilst also providing future stability in the form of institutional infrastructure?

The answer is surprisingly simple: to design the choice and cooperation frameworks in line with global developments of the future. As the CPB ar-gued in their *Economy and Environment* report, a guiding principle in state regulation had to be international agreements on environmental norms.[172] If global developments were driven by the forces of international collabora-tion, free-trade, and liberal democracy, as the CPB seemed to believe, reliable forecasts of how international agreements would develop were possible. In other words, the design of institutional infrastructures was itself a vision of the future, only this time of globalisation.

This new global future outlook had a remarkable feature: It provided such a long-term vision that any sense of urgency was muted. Put prosaically, "the issues of the future could always wait".[173] The global future would even-tually find the solutions that were plaguing society, but it could take a long time to do so. An example of such diluted urgency can be found in the RIVM

172  CPB, *Economie en milieu*, 30.
173  As Rob van Essen had put it, see op. cit. note 36

report *Sustainable Economic Development Scenarios for the Netherlands in 2030* (1996), upon which they collaborated with the CPB. The report had used the same scenario techniques that the VROM had used for the NMP in 1988, albeit adjusted for the new interpretation of sustainable development that the WRR had given two years earlier. Whereas the VROM had taken environmental policy goals (the reduction of emissions and pollution, etc.) to be stable in all scenarios, only differing in the political means to achieve those ends, the RIVM scenarios differed based on the valuations of individuals.[174] Consequently, scenarios with less government intervention could be equally as viable if individuals changed their behaviour and technological innovation could be fostered in other ways.

When contrasted with the *Concerns for Tomorrow* report a decade earlier, the different results the value-based scenario forecasting techniques rendered were much more ambiguous with regard to how urgent the issues of $CO_2$ and CFC emissions were. A high valuation of technology, for example, led to less urgency to reduce emission gasses in the present: One simply expected that emissions would drastically fall in the future due to technological innovation. Consequently, in so far as the report contained a political call to action, it was much more diffuse. The long-term forecasts the WRR and the RIVM presented had very concrete visions of utopia, but where the doom-filled futures of the 1970s had been very close, the utopian futures in stable institutional infrastructures were possibly much further away.

These reports stayed true to the ideal of social planning in which individual actions in the present could be connected to the unprecedented events of a radically open future. In the terms of Koselleck, they provided a bridge between the space of experience and the horizon of expectation. Private actors knew that their actions could have an impact because they acted on stable frameworks. Unexpected state actions would not threaten to undermine the effort public and private actors were prepared to put into co-operating. In addition, personal actions remained meaningful as they acted towards a utopian future of globalisation. Consequently, the foundation of regulatory planning was provided in a conception of historicity in which the actions of individuals were meaningful in the light of a stable long-term development towards prosperity. There was, however, a danger in this form of historicity that the CPB (nor any other Dutch government advisory council,

---

174 Centraal Planbureau CPB and Rijksinstituut voor Volksgezondheid en Milieu RIVM, *Duurzame Economische Ontwikkelings-Scenario's (DEOS) Voor Nederland in 2030* (Zoetermeer: Distributiecentrum VROM, 1996), 3.

for that matter) did not acknowledge. If the hopes and goals of history that provided individual actions with meaning were too far distant, these hopes and goals could just as easily be rendered meaningless.

In 1985, Paul Ricœur reformulated Kosselleck's warning from 1965 that a utopian future would become ever more unattainable in times of revolution. "We have to keep our horizon of expectation from running away from us," he warned.[175] Yet unlike Kosselleck, Ricœur was not worried by social upheaval that would drive the future in an ever-distant utopia. Rather, he worried that "fashionable" talk about human rights presented a very practical and achievable goal for the future, but that a utopia of a global community governed by human rights was just as likely to be an unattainable utopia. There would still be sovereign states and diverse peoples, he contented.[176] Human rights thus gave the illusion of bridging the gap between the space of experience and the horizon of expectation whilst in reality presenting an unattainable future. In 2004, François Hartog drew the dire conclusion that a notion of universal humanity underlying human rights activism had failed to bridge the gap between the present and the future.[177] Instead, it had torn them so far apart that not even a distant utopia remained—only an outlook with continuation of the present situation. As discussed back in section 1.3, Hartog considers this disconnection between the space of experience and the horizon of expectation as the condition for a regime of presentism. In such a regime, historians have become unable to think of the future as radically different from the present. Subsequently, the future has become only a continuation of the present.[178] Was a long-term future of governance still part of a modernist conception of historicity, Hartog asked, or was it a regime of presentism, in which the future was an endless continuation of the present?

Placing individual valuations centre stage, the WRR, CPB, CRMH, and RIVM argued that they were seeking a broader valuation of welfare beyond any narrow economic vision. Yet they placed sustainable development squarely in an economic framework in which, above all else, economic de-

---

175 Paul Ricœur, *Time and Narrative. Volume 3.*, trans. Kathleen Blamey and David Pellauer (Chicago: University of Chicago Press, 1988), 215.

176 Samuel Moyn argues that such a utopian future became attractive after more collective forms of social change became discredited. See: Moyn, *The Last Utopia*, chap. 4.

177 Hartog, *Regimes of Historicity*, 184.

178 Hartog, 185.

velopment, expressed in the growth of GDP, should not be tampered with.[179] The long-term stable outlook planning was to provide was simply grafted onto such an economic-based vision of the future in which deregulation and free markets dominated. The future they presented appeared radically open, with a utopian vision of global prosperity in sight. However, this future only presented a continuation of the liberal economics and politics of the present.

## Conclusion

The ideal of regulatory planning and the image of the future of governance had an uneasy relationship with state decisions. As norms and authority no longer emanated from the decisions of the state and politics had to go beyond the state to find a new imaginary, the whole idea of the *decisionist imaginary*, as I have theorised, seems at odds with this new ideal. However, even the CPB had to conclude in 1996 that the decisions of the government did matter and often gave shape to individual preferences.[180] Also, as their use of welfare models in the search for an environmental norm indicate, deciding what should be part of the fixed long-term choice infrastructure and what could be left to the flexible formation of individual norms and values was still a decision of the state, in which the scientific experts of the CPB had to imagine a choice framework within which the state could make those decisions—in this case, welfare models. However, such welfare models still adhered to a conception of democracy. The CPB claimed that these models gave transparency to government decisions that could be monitored by citizens. Bringing together state action, expert opinion and public accountability, the CPB still contributed to a decisionist imaginary that can be called particular to the idea of regulatory planning. As I have argued in this chapter, this decisionist imagination was not a result of a more complex global reality, but instead was very much designed by the government.

However, with all the emphasis on individual preferences, social values, norms, and an imaginary beyond the state, the decisionist imaginary as an imaginary of the state disappeared into the background. The imaginary of politics was no longer aimed at the state. Instead, mediating institutions became the main vehicle for democratic politics. Consequently, the government could pretend that it was not making any decisions at all, instead only fixing the choice framework. The decision was imagined as that of all the mediating social organisations. With

---

179  For this development in an international context, see: Matthias Schmelzer, *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm* (Cambridge, UK: Cambridge University Press, 2016), 318–35.

180  CPB, *Economie en milieu*, 33.

such a vision of a diffuse society there no longer seemed to be a need for collective solidarity, and no longer a collective need for different images of the future towards which to strive. In place of collective solidarity, the Dutch government was able to revive the corporatist ideal of unions, industries, and social organisation in the driving seat of the state.[181] The state now fostered a cooperation and consensus between private and public actors instead of a collective solidarity.

---

181 For this point see: Rudy B Andeweg, "Coalition Politics in the Netherlands: From Accommodation to Politicization," *Acta Politica* 43, no. 2 (July 1, 2008): 254–77, https://doi.org/10.1057/ap.2008.8; Hendriks, "The Story behind the Dutch Model."

# Conclusion:
## Planning and the State

*To trace the genealogy of the state is to discover that the concept has been a subject of continuous contestation and debate. Of late, however, we have chosen to confront this intellectual heritage in such a way as to leave ourselves astonishingly little to say about it. We seem largely content to reiterate that the term state is simply a way of referring to an established apparatus of government, and that such governments are of slight and diminishing significance in our newly globalized world.*

—Quentin Skinner, *The Sovereign State: A Genealogy* (2010)[1]

This history of Dutch planning comes to an end in the 1990s, not only because the end of the 20th century provides a natural, if artificial demarcation of time, but also since the planning image developed in the 1990s is still in place. Although, under the pressure of recent Dutch political controversies—for example, the handling of the economic crisis of 2008, the management of nitrogen oxide emissions, and the COVID-19 pandemic—cracks have started to appear in the Dutch planning ideal, no major developments of this image have yet occurred.[2] Consequently, some reflection on this latest

---

1 Quentin Skinner, "The Sovereign State: A Genealogy," in *Sovereignty in Fragments: The Past, Present and Future of a Contested Concept*, ed. Hent Kalmo and Quentin Skinner (Cambridge, UK: Cambridge University Press, 2010), 44.

2 Some English sources on these controversies are: Walter Kickert, "How the Dutch Government Responded to Financial, Economic and Fiscal Crisis," *Public Money & Management* 32, no. 6 (November 1, 2012): 439–43, https://doi.org/10.1080/09540962.2012.728784; Isabella Kaminski, "Dutch Supreme Court Upholds Landmark Ruling Demanding Climate Action," *The Guardian*, December 20, 2019, sec. Environment, http://www.theguardian.com/world/2019/dec/20/dutch-supreme-court-upholds-landmark-ruling-demanding-climate-action; Thomas Erdbrink, "As Coronavirus Surges, Chastened Dutch Wonder, 'What Happened to Us?,'" *The New York Times*, October 29, 2020, sec.

planning image is appropriate.

In this conclusion, I explore some implications of the history of Dutch planning, as described in this thesis, to open the possibility for larger discussions on the philosophy of historiography, political theory, and science and technology studies (STS) in the planning context. I want to discuss three topics, namely the state, scientific expertise, and the relation between the two, linking them to the history provided here. In conclusion, I make two preliminary suggestions on these topics: The first is that whether we like it or not, the state remains the most prominent entity that can bind political action to the future—that is to say, to connect the space of experience and the horizon of expectation, either by bridging different experiences of time or by conceptualising new interpretations of modern historicity. Second, the authority of science in our modern society is not solely derived from societal trust in science, or the liberal image of science that is produced in political institutions. Rather, in significant part, it is the product of the authority of the state. I will begin, however, with a brief recapitulation of my main argument.

## I. An Overview of the Argument

The deceivingly simple question with which I opened this thesis was how the conception of the future in politics went from a radical vision of a transformation of society to a vision of a perpetual present. I suggested that planning, once thought of as heralding a radical vision of the future, played a crucial role in this change.

In the first theoretical chapter I have argued, on the basis of Reinhart Koselleck's writings, that socio-economic planning should be seen as a historical science. In other words, historicity (understood as the linking of past, present, and future and the [re]establishment of the meaning of history) is fundamental to the political and scientific project of planning. Planning was inherently part of the modern conception of historicity that emerged at the end of the 18th century in which politics became future-oriented. In fact, by bridging the gap between the *space of experience* (understood as everyday practical life) and the *horizon of expectation* (that which the future

World, https://www.nytimes.com/2020/10/29/world/europe/covid-19-netherlands.html.

could bring), planning helped politics to orient itself towards the future. However, planning was not simply a follower of the dominant conception of historicity, instead shaping that conception in several ways. Referencing the work of François Hartog, I described how the struggle between individual experience and the modern *regime of historicity* produced many different modalities of historicity. Instead of speaking about one uniform regime of historicity, planning reacted and gave shape to a variety of reiterations of modern historicity.

The second chapter provided a concrete instance of the interplay between experience and regimes of historicity in the emergence of economic planning in the interwar period. At the start of the 20th century, scientists started to define their public role in relation to modernity—the singular horizon of progress. Science self-identified as one of the forces that pushed time onwards towards this horizon of modernity. Embracing modernity, scientists adopted a discourse in which unease with that very same modernity took centre-stage; they feared the alienating and individualising power of modernity. This fear stemmed from an opposition between modernity and community, an opposition between the abstract rule-governed world of wider society and the meaning-giving experiences of everyday life. Science, interwar scholars thought, should bring together these two experiences of time. Discussing the works of Otto Neurath and Jan Tinbergen, I argued that the interbellum discourse of planning adhered to this scientific ideal and attempted to bridge the space of experience associated with community and the horizon of expectation dominated by the onward march of modernity.

The first chapter also introduced my central theoretical notion: the *decisionist imaginary*. With a preliminary definition as the institutions, symbols, and technology that produce an vision of the political decision within which individuals can imagine themselves as part of the social whole of the state. This vision denotes who has to take decisions, on the basis of what information, and on whose authority. As such, it forms the intersection between scientific expertise, the state, and democracy. As demonstrated in the second chapter via the works of Neurath, historically, the decisionist imaginary emerges as the practice of scientific experts, providing the objective language upon which decisions could be mapped and democratic deliberation could commence.

In chapter three, I examined how, after the Second World War, under the pressure of the Cold War, the modernist conception of historicity em-

braced by interwar planners became widely questioned. The idea of singular progress, so central to modern historicity, became associated with the totalitarian regimes of National Socialism and communism. In this development, the idea of a radical future seemed to lose its grip on the political imaginary; narratives describing the "end of ideology" predicted that no new stages of history would appear. However, it would be wrong to conclude that the end of history arrived early. Economic planners attempted to provide a new utopian vision for society that could counteract the more pessimistic conceptions of progress. Essential in this development was the adoption in the social sciences of a set of formal tools, often described as techniques of *Cold War rationality*. Discussing the early history of the CPB and their development of decision models, I argued that these tools entailed a more individualistic view of society, devoid of any communitarian ideals, in which the virtues of deliberation mattered less. A new decisionist imaginary appeared in which the role of scientific experts was to foster stable behavioural patterns through the use of formal tools.

A radical image of the future reappeared in the second half of the 1960s. As argued in the fourth chapter, with social, environmental, resource, and technological disasters appearing on the horizon of expectation, time was experienced at an accelerating pace and the future appeared more open than ever. In order to politically avert these disasters, citizens had to become future-minded, imagining new possible futures beyond the economic growth paradigm of the welfare state, leading to a democratisation and pluralism of future images. In such a situation, planning was to provide state sanctioned images upon which citizens could produce new visions of the future. Planning was also to provide the infrastructure within which these new visions could orient the state towards a new future, again bridging the gap between the space of experience of the horizon of expectation. The CPB once more used system modelling in a novel manner to give a concrete form to this decisionist imaginary of democracy envisioned as citizen participation in policymaking through feedback loops.

However, when an experience of crisis emerged in the 1970s, this new planning ideal quickly fell out of favour. Neoliberals and New Left intellectuals argued that the democratisation of the planning ideal only gave power to elites and minority interest groups. Planning now had to be used to safeguard the state against these shadowy influences. Moreover, the new spirit of emancipation, unleased in the open future of the 1960s, threatened to

overthrow the liberal and capitalist order altogether. To avert a socialist authoritarian society, planning was needed to stabilise the state. Neoliberals argued that social movements could better achieve their social aims through decentralised forms of decision making and the timely arrival of microelectronics made such decentralised forms of civil society possible.

A stable state, however, did not avert the social, environmental, and technological catastrophes of the future, and the crisis narrative continued into the 1980s. As became clear in the sixth chapter, the state was increasingly seen as a problem, both in and of itself. It was either the source of an ideology that turned society into a cold-hearted machine, or constituted an obstacle to collective forms of solidarity. Therefore, if politics was to regain its collective solidarity, it had to look beyond the state. For Dutch social democrats, the ideal of citizenship in particular provided a viable mechanism via which to foster a collective solidarity without the use of the state. However, in environmental policymaking, it became clear that citizens needed a stable choice framework in order to internalise the new environmental norms that the government was propagating. Social economic planning was to provide this framework by establishing a new horizon of expectation in which governance slowly heralded a more liberal and sustainable future via the free actions of citizens, thus reimaging the decisionist imaginary.

This bridging of the space in which individuals developed their own personal norms and the liberal horizon of expectation that planning was pursuing sounded, at least in theory, profoundly open in nature—a form of historicity in which the many layers of the experience of time could co-exist and cooperate. However, it also entailed an ever receding future devoid of (any) urgency. This image of the future could no longer demand citizens to take political action. Moreover, with its emphasis on cooperation and consensus, clashes between different images of the future were pacified. Consequently, political struggle, as defined by Claude Lefort, disappeared. It created the conditions in which radical futures disappeared and the present was experienced as perpetual. François Hartog argued that this gap, between the present and the future, collapsed the distinction between the space of experience and horizon of expectation, resulting in a possible new regime of historicity: *presentism*.

## II. Presentism Revisited

The history of Dutch planning would seem to suggest that the idea of the radically open future peaked in the late 1960s and early 1970s, giving way when the prospect of a more radical future was blunted by neoliberal and New Left concerns, resulting in presentism. However, as I have argued, the radically open future of the 1960s never disappeared (even if it did become cut off from collective forms of political action). Moreover, despite the heavy criticism modern historicity received from the 1950s onwards, the idea of a singular horizon of progress never left the political imagination. This raises the question whether presentism is the most apt description of our current mode of historicity, and whether it truly forms a new regime of historicity distinct from the modern regime.

Investigating what a presentist conception of historicity might entail, before making an assessment whether (or not) it is an apt moniker for our current era, would seem a prudent approach here. As explained in section 1.3, some historians have recently embraced presentism as a liberation of a form of historicity that was ultimately associated with a very Eurocentric—some might say imperialistic—notion of what historiography entailed.[3] If modern historicity is no longer perceived as a natural given by historians, a space could be opened up to study the forms of historicity and experiences of time of those people who did not participate in the development of modernity directly—those who were oppressed or marginalised by it.

This recent development was illustrated via the proposal by Dan Edelstein, Stefanos Geroulanos, and Natasha Wheatley for *chronocenosis*. Their plea bears a striking resemblance to the argument put forward by Bruno Latour in his *We Have Never Been Modern* (1991). Latour argued that modernity was inaugurated by the bifurcation of nature and culture into separate spheres, which set it apart from non-modernity, where natural and cultural actors were intimately intertwined.[4] However, Latour argued, in modern times, scientific knowledge and cultural artefacts are still produced by ac-

---

3  Marcus Colla, "The Spectre of the Present: Time, Presentism and the Writing of Contemporary History," *Contemporary European History* 30, no. 1 (February 2021): 124–35, https://doi.org/10.1017/S096077732000048X.

4  Dan Edelstein, Stefanos Geroulanos, and Natasha Wheatley, "Chronocenosis: An Introduction to Power and Time," in *Power and Time: Temporalities in Conflict and the Making of History* (Chicago: University of Chicago Press, 2020), 1–49; Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1993).

tants that escape characterisation as either natural or cultural. Modernity sold itself the narrative that it was different from non-modernity, however, upon closer inspection, it becomes clear that this narrative is based on a false distinction. Similarly, Edelstein, Geroulanos, and Wheatley argue that modern historicity imaged itself differently from non-modernity by its adherence to a singular horizon of progress.[5] Upon closer examination, however, this singular form of expectation appears to comprise many different experiences of time that are not ordered in a sedimentary manner, as Koselleck imagined, but are "at once competitive, conflictual, cooperative, unstable, and sometimes even anarchic."[6] Latour's argument was aimed at removing the frontier between modernity in anthropology: If other peoples were no longer imagined as radically different, a space would be opened to study the modern and the non-modern on a symmetrical basis.[7] Edelstein and colleagues proposed that the same can be done for history.

Broadly speaking, I agree with this approach. As I have attempted to show, the modern form of historicity was never a stable totalising whole, but rather was sustained by different experiences of time that were constantly interacting with each other in reiterating the modern form of historicity. However, the explanation that Edelstein, Geroulanos, and Wheatley offer about how different, often competing experiences can constitute one dominating form of historicity contrasts with my own findings. They reference the factor of social power that let one form of time experience dominate over the others and, inspired by Foucault, they conceive of this power as diffuse and decentralised. Power therefore does not primarily reside in the state, but is distributed amongst many social institutions and spheres, which work together in a strategic elaboration. They therefore reject the classic political theory of power as the "question of who had the authority to decide what people did with their time, and whether or not that authority was respected."[8] What appears as a dominating regime of historicity consists, for Edelstein, Geroulanos, and Wheatley, in a "crisscross of different, often contemporaneous pasts and predictions (ecological, social, anthropological, familial)."[9] The present

---

5  Edelstein, Geroulanos, and Wheatley, "Chronocenosis," 16.

6  Edelstein, Geroulanos, and Wheatley, 27.

7  Bruno Latour, "Biography of an Inquiry: On a Book about Modes of Existence," *Social Studies of Science* 43, no. 2 (2013): 287–301, https://doi.org/10.1177/0306312712470751.

8  Edelstein, Geroulanos, and Wheatley, "Chronocenosis," 7.

9  Edelstein, Geroulanos, and Wheatley, 27.

for them is simply a "ceasefire" amongst different pasts and futures.

In contrast, I have argued that one actor, with its own past and predictions, often dominates in establishing past, present, future and the links between them. That actor is the state. Planning, in this conception, is a technique used by the state to enforce the ceasefire between different parties. An example is the social planning ideal discussed in chapter four, where planning was expected to synthesise different futures into one course of action for the state to take. If Edelstein et al.'s analysis of presentism is true, the state should have lost its primary role in the imaginary of history, yet that appears not to be the case. Even in the seemingly presentist regime of regulatory planning (discussed in the final chapter), the state still plays a vital role in providing a background image of the future against which the diverse futures and pasts of other actors can take shape. If presentism is the right qualifier for this regime of historicity, then it was not brought about in the crisscross of different futures, but rather a product of the state's image of the future.

Consequently, my argument of the decisionist imaginary runs counter to Edelstein, Geroulanos, and Wheatley's account of power. In socio-economic planning, the classic question of "who gets to decide" was the imaginary that could bind experiences of time together in either more repressive, or more liberal regimes of modern historicity. It divided authority between the state, the democratic people, and the scientific experts by bridging the gap between past, present, and future. The state remained a central point of reference in this distribution of power. In Lefort's terms, it was the symbolic order that allowed society to imagine itself as a whole, thus institutionalising symbolic state power in different institutes and spheres. Given the fact that the regulatory planning ideal is still in place, is seems premature to speak about a regime of presentism. Indeed, with a singular horizon of progress still dominating, the modern conception of historicity has never left us. However, if this is true, one might wonder, is my characterisation of current planning as perpetuating the present misjudged?

## III. The Anthropocene and the Human Agent

The idea that a regime of presentism might not be the best description of our current conception of historicity has also been put forward by Zoltan

Boldizsar Simon who, in a distinctly Latourian vein, claims that "we have never been presentist."[10] In line with my own argument, Simon argues that a future with the promise of radical change had never disappeared from the popular imagination.[11] Moreover, he contends that recent decades have witnessed the emergence of even more radicalised visions of the future in the form of global warming, technological singularity, and (if I may) global pandemics.

What makes all of the above visions even more radical is that they eradicate the role of humans in history.[12] Global warming—the neoliberal's worst nightmare—brings us into the period of the Anthropocene, a vision of deep-time far larger than any conceivable human history in which the human being is only a small actor amongst forests, rivers, animals, tectonic plates, $CO_2$, solar bursts, and so on.[13] Technological singularity—the crackpot version of neoliberalism—predicts the usurping of human agency by a new agency: that of machines.[14] In its less radical version, machines increasingly take over tasks previously conceived as uniquely human, a narrative presented as inevitable, something humans can neither halt nor hasten.[15] Pandemics meanwhile place viruses, as the actors of history, centre stage—micro-organisms that will either wipe out humanity or end globalism, thus confining everyone's space of experience to small living rooms. Simon still considers these unprecedented events as the drivers of history—that is to say, a form of historicity opened up by these radically unpredictable events. No neoliberal canalisation of social forces is able to halt it. Indeed, quite the opposite is true, as such action can only hasten its arrival.

---

10 Zoltán Boldizsár Simon, "We Have Never Been Presentist: On Regimes of Historicity," *JHI Blog* (blog), May 2, 2016, https://jhiblog.org/2016/05/02/we-have-never-been-presentist-on-regimes-of-historicity/.

11 Jenny Andersson, *The Future of the World, Futurology, Futurists, and the Struggle for the Post-Cold War Imagination* (Oxford: Oxford University Press, 2018), 20; Marek Tamm and Laurent Olivier, "Introduction: Rethinking Historical Time," in *Rethinking Historical Time: New Approaches to Presentism*, ed. Marek Tamm and Laurent Olivier (London: Bloomsbury Academic, 2019), 2.

12 Zoltán Boldizsár Simon, *History in Times of Unprecedented Change: A Theory for the 21st Century* (London: Bloomsbury Academic, 2019), 26.

13 See also: Dipesh Chakrabarty, "Anthropocene Time," *History and Theory* 57, no. 1 (2018): 5–32, https://doi.org/0.1111/hith.12044.

14 A current popular version of this thesis is provided in: Yuval Noah Harari, *Homo Deus: A Brief History of Tomorrow* (New York: Harper Perennial, 2018).

15 Aaron Bastani, *Fully Automated Luxury Communism* (New York: Verso, 2019); cf. Aaron Benanav, *Automation and the Future of Work* (New York: Verso, 2020).

Real presentism thus seems a misplaced qualifier for our current regime of historicity. Unprecedented events still loom on the horizon, but their change threatens to erase human agency and civilisation completely. In other words, faced with these radical futures humans discover their inability to steer towards a particular future. Consequently, the future of an improved human society has become harder and harder to imagine, whilst a future with no society at all has become easier to visualise. As Fredric Jameson's famous expression goes: "[I]t is easier to imagine the end of the world than the end of capitalism."[16] Simon concludes that our current conception of time, whether we call it presentism or not, fundamentally alters the nature of history. Unprecedented events do not follow from the events in the practical realm of humans in the present. Rather, they appear as wholly disassociated from both past and present. Consequently, linking past, present, and future, and establishing historical meaning is impossible. This does not entail a presentist conception of historicity, but rather, no historicity at all—radical indeed.[17]

Yet a less radical variation on this assessment of the regime of historicity in the 21st century can also be found, this time in Bruno Latour's Gifford lecture series, *Facing Gaia* (2017). In these lectures, Latour conjures the openness and uncertainty of the future by arguing that the inauguration of the Anthropocene showed that the earth is too limited for a future of endless economic growth and wealth to be true. As a reaction, the ruling elites have vigorously protected their own interests, fleeing into a utopian image of the future that Latour associates with a globe (as opposed to the real earth), leaving the other inhabitants of the earth struggling to live. However, such a construction cannot last long in Latour's narrative. Social movements and forces (some no longer purely social) cannot be constrained any longer. Any governance or supreme arbiter that can herald a stable future has thus disappeared or at the very least lost its legitimacy. Latour identified three examples of the governing meta-actors of history: the state, the laws of nature, and the economy. In what he calls the "old climate regime," these meta-actors would settle symbolic wars over the habitability of the earth. It was in obedience to their laws that the inhabitants of the earth could live together and not

---

16 Fredric Jameson, *The Seeds of Time* (New York: Columbia University Press, 1996), xii.

17 Simon, *Unprecedented Change*, 50.

threaten the existing order.[18] However, none of these entities seem to provide a believable solution to the current climate problems.

The problem of historicity, in this vision, is not so much that the future has been domesticated by the present, but rather that the humans—and in Latour's vision, also non-humans—can no longer rely on the stable institutions of the past to guide them into the future in accordance with their interests and values. Neither the state with its rule by law, nor the market, nor the scientific laboratory offer a place where the collective inhabitants of the earth can decide on what kind of future they want, or "where they want to land," in Latour's phrasing.[19] This is in line with the reasoning by Edelstein, Geroulanos, and Wheatley, who celebrate the disappearance of the old regimes of historicity as opening up the space in which a multitude of actors struggle over what constitutes the present. That is not to say that the state, the market, and science are not important, as they can help to formulate the interest of each inhabitant of the earth, but they should be taken as actors amongst the multitude of actors of planet Earth, and no longer as arbiters standing on the side-lines. In this image, the state, the markets, and science are surveying institutions, sensitive to all the needs of the earth of both humans and non-humans.[20] In other words, they are administrative organisations.

Our current predicament of history, in which human agency is potentially erased, is closely connected with the delegitimisation of the ultimate arbiters. Although Latour makes a plea for a parliament of things as the decider for the future, this seat of politics, thus far, only exists in simulations and has left little of anything concrete with which to take collective action.[21] As Simon suggests, there is no believable story left of how humans are to act upon the course of history.[22] If presentism is still a viable quantifier of our current conception of historicity, it is not because individual actors have lost anything radical to act upon, but because individual actors have lost their

---

18 Bruno Latour, *Facing Gaia: Eight Lectures on the New Climate Regime*, trans. Catherine Porter (Cambridge, UK: Polity, 2017).

19 Bruno Latour, *Down to Earth: Politics in the New Climatic Regime*, trans. Catherine Porter (Cambridge, UK: Polity, 2018), 106.

20 Bruno Latour and Christophe Leclercq, *Reset Modernity!* (Cambridge, MA: MIT Press, 2016).

21 Latour, *We Have Never Been Modern*, 142–45; Latour, *Facing Gaia*, chap. 8.

22 Zoltán Boldizsár Simon, "(The Impossibility of) Acting upon a Story That We Can Believe," *Rethinking History* 22, no. 1 (January 2018): 105–25, https://doi.org/10.1080/13642529.2017.1419445.

ability to act upon that future. Radical, unprecedented futures and the present are all that remains since there is no longer a meaning of history.

## IV. The Disappearance of the State from the Image of Politics

Although STS scholars have put much effort into undermining the image of science as an ultimate arbiter of social conflicts (on which, more later) and critical theory did a lot to undermine the authority of the market, the most maligned meta-actor that Latour identifies is, without doubt, the state. Since the 1970s, the state has been distrusted and hated by Left and Right alike—from liberals to the New Left, from elites to the marginalised.[23] Latour's demotion of the state, from sovereign arbiter, to an apparatus of surveillance or administration, is far from novel and forms part of a wider, rather pervasive trend. Reflecting on the place of the state in political theory, Quentin Skinner in his Spinoza lectures remarked:

> There has been a tendency of late to set aside the concept of the state as one of vanishing significance in our newly globalised world. […] We are now told that, instead of relying on the state to shape society, we should cultivate systems of 'governance'.[24]

Skinner paints a contrast between the medieval notion of *governance* and the renaissance notion of *reason of state* as two models of what state action entails. Reason of state indicates a more interventionist state, with a strong chain of (direct) command, acting upon certain critical moments to enlarge and consolidate its power over its territory. Governance, in contrast, emphasised "wise guidance" and rules, the value of which had been proven over an extended period of time. Skinner notes that, in the present day, although the state is still very much in the business of starting wars and patrolling borders—tasks traditionally associated with reason of state—in political theory, it is governance that ruled supreme as the description par excellence of the state.

Following Latour and Skinner, Simon's assessment of the current re-

---

23 It has to be said, that from this perspective, neoliberals have been the most vocal supporters of the state.

24 Quentin Skinner, *Hobbes and the State*, Spinoza Lectures (Assen: Royal Van Gorcum, 2016), 11.

gime of historicity as the erasure of human agency acting upon history can be extended by identifying the disappearance of another actor from history: the state itself—at least in the imaginary of the political sciences. In fact, the disappearance of these two types of actors of history are intimately connected. Katrina Forrester, in her history of analytic political philosophy, *In the Shadow of Justice* (2019), has argued that philosophers have gradually replaced the state as actor and the site of politics, first, by placing the individual's conscience as central to politics, and later by swapping the state with society as a whole, or the abstract principles of justice, as the proper object of political thought.[25] Forrester's argument focuses mainly on the making and reception history of John Rawls' seminal *A Theory of Justice* (1971), showing how Rawls' focus on principle justice deliberately suggested a move away from the state.[26] Rawls developed his theory in the 1950s against the backdrop of Cold War anti-state sentiments, in an attempt to replace the state as the representation of the political community with the rules underlying the functioning of a society as the object of philosophical analysis. In a Wittgensteinian move, these rules were enacted in the practices of society and as such

> carved out the domain of politics as the ground rules of society, not the plural associations within it. It was not the centralized state as conceived in state theories that described states as agents or as legal persons acting as a corporate entity through its representatives. The basic structure was a practice, *not an agent, and practices did not act.*[27]

Political philosophers had to study the rules of society and whether they were just, in particular, whether they provided fair starting points and opportunities to "play the game." It led Rawls to postulate his famous definition of justice as fairness.[28] Over time, this resulted in a very abstract discourse not focussed on a singular political issue, but rather on the Kantian evaluation of whether practices were just or not.

At the end of the 1960s and into the 1970s, against the backdrop of the Vietnam War and the ethical dilemma of the conscientious objector, this

---

25 Katrina Forrester, *In the Shadow of Justice: Postwar Liberalism and the Remaking of Political Philosophy* (Princeton: Princeton University Press, 2019).

26 Forrester, 18.

27 Forrester, 32 emphasis added.

28 John Rawls, "Justice as Fairness," *The Philosophical Review* 67, no. 2 (1958): 164–94, https://doi.org/10.2307/2182612.

Kantian focus was met with the emergence as the individual conscience as the subject and object of political action.[29] Comparable to the futurist conception of how radical new futures shaped the individual conscience, opening up new possibilities of political action (as discussed in the third chapter), political change in analytic philosophy was to follow from individual action, not from the state. As legal philosopher Sanford Levinson noted in 1973, political discourse started to conceive of government as a "Kafkaesque world of institutions without actors, a mad kind of world where individual activities (though not 'decisions') culminate in a world that no one desires and for which no one is responsible."[30] In other words, it could no longer be expected from governments and the state that they would act in an ethical manner. Analytic philosophy instead focussed on the actions of state functionaries and evaluated whether those could be considered just or not, as Forrester continues: "setting aside the questions of bureaucratic, corporate, and dispersed responsibility."[31] What Forrester analyses is the changing location of political action in post-war political thought, from the state to society as a whole and then ultimately to the individual. In the Dutch history of planning, a similar movement can be described.

Planning, in its efforts to weave together multiple experiences of time, has played a dual role with regard to the state. As I have argued, planning in the Dutch tradition has always reacted to local experiences of time. Whether this was the ethical values and lived experience of the inter-war period, the deliberations between corporations and unions in the initial post-war decades, or the individual conscience of the 1960s and 1970s. As such planning has always wanted to make individual actions the bedrock of political change. Conversely, by its very nature of being *central* planning, it could only do so in reference to a central authority: It was this central authority that had to create the space for these local experiences and actions. In general, the state was imagined as a central control centre, sensitive to the local concerns and decisions, and only acting upon those concerns and interests. The state of the 1950s had to follow the reordered preferences of unions, corporations, and citizens. In the system dynamics models of the 1970s, the state had to coordinate the democratisation of all policy areas through feedback loops.

---

29  Forrester, *In the Shadow of Justice*, 89–96.
30  Sanford Levinson, "Responsibility for Crimes of War," *Philosophy and Public Affairs* 2, no. 3 (1973): 271; cited in: Forrester, *In the Shadow of Justice*, 96.
31  Forrester, *In the Shadow of Justice*, 97.

Yet at the same time, through its method of (what is now called) regulatory science, it gave shape to the decisions of the state as being sovereign, ensuring that decisions could be identified with elected officials, whether they were bound to democratic or scientific legitimation. Moreover, in so far as its focus was to bind the sovereign political decisions to the individual acts of citizens, planning sought to aggregate diverse political actions and preferences into one utility function, or into a collective political will or action. In that sense, planning enacted the state as a collective representation of all the actions and preferences within society. In short, planning focussed both on the individual and the state as political actors and in doing so, connected their actions.

However, in the 1990s these two tasks of Dutch planning, both enabling the actions of state and individuals, became increasingly blurred. Actions of the state were not bound by the individual action of its citizens. Instead, individuals could collaborate with public officials in performing public (state) tasks. As discussed in the sixth chapter, state decisions were imagined as consensuses between corporations, unions, political parties, and stakeholders (the so-called "polder model" in Dutch discourse).[32] The state did not carry responsibility for them. Instead, the responsibility was shared amongst all of the parties involved within the consensus.[33] Planning was vital in the making of these consensus-driven state decisions. It ensured, to borrow the Wittgensteinian games metaphor of Rawls, that the parties participating in the consensus-finding process adhered to the same rules and felt themselves bound to the outcomes of those games. As such, the political reality was that the backrooms in which these consensuses were negotiated became the main stage of politics. Planning, however, imagined that the acts flowing from these decisions no longer had to be carried out by the state. Instead, planning had to design a choice-framework with the appropriate incentives and nudges in which private actors, whether they were citizens or corporations, would carry out those decisions. Individuals were thus both the input of decisions and the performer of those decisions. The state effectively disappeared as the enactor of political decisions. As Forrester describes: Rawls, with his notion of the "basic structure" that is the underlying rules of soci-

32 Corina Hendriks, "The Story behind the Dutch Model: Consensual Politics of Wage Restraint," PhD thesis (University of Amsterdam, 2010).
33 Rudy B Andeweg, "Coalition Politics in the Netherlands: From Accommodation to Politicization," *Acta Politica* 43, no. 2 (July 1, 2008): 254–77, https://doi.org/10.1057/ap.2008.8.

ety, aggregated all political institutions—the state, political parties, unions, and corporations—into one amorphous blob. When later political scientists, philosophers, and planners started to disaggregate society once again, rather than these institutions, only individuals appeared.[34]

The implication of the disappearance of the state is again coupled by Forrester to the problems of the future. As she notices, the emergence of the absolute state in the 17th century coincided with a new historical sensibility in which the future became increasingly important. Due to the practices associated with early capitalism, such as insurance, credit, wills, and stocks, there was a need to bind individuals to obligations in the future, even if they themselves were not going to be the ones to fulfil those obligations—that task falling to their heirs and successors. The state was thus the evident institute to bind the obligation of individuals over generations. By binding their fates to the state, citizens also gained an obligation to the future. However, under the pressure of the political discourse of the 1970s,

> an 'eternal moral person' of the state was no longer viable, [as historian] Peter Laslett declared: 'What is wanted is a relationship between generations which is individual as well as social, and passes through mortal individuals rather than through deathless collectivities.'[35]

Individuals did not only become the sole bearers of political change, but also the bearers of the future. Edelstein, Geroulanos, and Wheatley celebrate this disappearance as, in their account, a singular future could only be possible through the interaction of individual experiences of time.[36] Yet, with the disappearance of the human actor in history, as Simon argued, these bearers of the future also became unviable.

Given the observations by Simon, Latour, and Forrester, Hartog's definition of presentism no longer seems to hold. Still, as I noted earlier, our current regime of historicity bears all the characteristics described by Hartog. I therefore propose to hold on to the label "presentism," albeit with a new, threefold definition. First, it is, as Simon has argued, the disappearance of human agency bearing upon history. Second, as Latour suggests, it is the

---

34 Forrester, *In the Shadow of Justice*, 274.
35 Forrester, 175; Peter Laslett, "The Conversation Between the Generations," in *The Proper Study*, Royal Institute of Philosophy Lectures (London: Palgrave Macmillan UK, 1971), 42–43, https://doi.org/10.1007/978-1-349-81581-4_11.
36 Edelstein, Geroulanos, and Wheatley, "Chronocenosis," 16.

delegitimisation of the state, the market, science, and technology as the arbiters of a choice for the future. Third, as Forrester has argued, it is the disappearance of a locus for (collective) political action, whether this was the state, the laboratory, or the market.

Contrary to Edelstein, Geroulanos, Wheatley, Simon, and Latour, I have argued in this thesis that presentism did not solely arise out of shifting cultural sensibilities, or even the unprecedented events of the Anthropocene, but that planning and the state played a crucial role in its emergence. Adhering to my own methodological historicism, I do not believe that the modern conception of historicity has ended. In the background, planning and the state still orient our politics towards the future. Presentism is therefore best conceived as another regime of modern historicity in which there is a space of experience in which political actions are solely carried out by individuals and there is a horizon of expectation on which radical societal change is to be expected, even if there is no longer any believable idea of how the two are to be connected. As I have argued in the introduction, the fundamental task of planning is to bridge the space of experience and the horizon of expectation, but under the presentist conception of historicity, it has failed miserably in this task. When I claim that planning is in the service of perpetuating the present, it is precisely this predicament that I describe. The underlying cause of this failure is the exclusion of the idea of the state from the political imagination. The ultimate irony of Dutch planning in the 20th century is that it has precipitated this exclusion.

## V. Scientific Authority and the State

Political theory was not the only academic discipline that helped to dethrone the state as the locus for politics. As Latour's writings attest, to a significant extent, STS was responsible for the undermining of science as arbiter of the future. This denunciation was primarily directed to a so-called *liberal image of science,* but nevertheless ended up delegitimising the state. How STS has theorised and analysed science bears an uneasy relationship with the state. On the one hand, STS has sought to dislodge the practices of science from the power of the state, showing that science does not function from a central point of power, nor relied on a stringent interpretation of the law (of nature). On the other hand, STS has investigated science in terms of what

the state and science had in common, namely their shared administrative and surveying practices. As a result, STS has understood the state mainly as an administrative and surveying apparatus, rather than a symbolic order, an actor, or as a locus for political action. In this thesis, I have tried to explore how, with the help of STS theories, the state could be imagined as more than its administrative practices. For this final section, I want to suggest that if STS takes the state to be more than its administrative apparatus, this has implications for how scientific authority should be conceived.

Historically speaking, STS has largely neglected, to use Skinner's terms, the reason of state model in favour of the governance model. Key developments explored in this thesis partly explain this neglect. After the Second World War, the large-scale government funding of science encouraged a bureaucratic image of science in philosophy. Central to this image was the liberal conception of science as neutral and the driver of innovation.[37] As discussed in the fourth chapter, Jürgen Habermas spelt out the implications of the government's uncritical reliance on scientific expertise under these assumptions as amounting to a technocratic model of politics. When STS emerged as an academic field in the 1970s, it took this liberal imagine of science and planning as technocracy as a starting point and central anathema. Science, or the image under which it was acting, was thought to be inherently depoliticising, searching for the stability of institutional processes in a bureaucratic manner, and excluding lay knowledge through its elitism.

A famous example of such a critique of science and the state is Langdon Winner's article "Do Artifacts Have Politics" (1980). Discussing questions of energy technology, Winner argued that nuclear power was neither neutral nor simply beneficial to society: The use of this technology required a centralised system of power in the form of the state.[38] In short, relying on nuclear power for the future of energy supply also entailed an increase in power within the centralised state. Winner questioned whether this increase of centralised power was in accordance with the ideal of democracy: Was there not a risk that the science of nuclear energy under its neutral guise actively worked against more democratic ideal of science, understood as decentralised forms of deliberation and decision making? In hindsight, early

---

37  Charles Thorpe, "Political Theory in Science and Technology Studies," in *The Handbook of Science and Technology Studies*, Third edition (Cambridge, MA: MIT Press, 2007), 63–82.

38  Langdon Winner, "Do Artifacts Have Politics?" *Daedalus* 109, no. 1 (1980): 121–36.

STS was riding the wave of suspicion against central bureaucracies that characterised the New Left and neoliberal discourse of the 1970s (as discussed in the fifth chapter). Consequently, When STS turned explicitly to questions of political theory, this question took the shape of how scientific expertise could be democratised, just as Habermas had already done in the 1960s.

The emphasis on science as acting in service of the state led early STS scholars to investigate that which necessarily connected the state and science, namely, administrative power. In their milestone study *Leviathan and the Air-Pump* (1985), Steven Shapin and Simon Shaffer described how Robert Boyle's attempts to prove the working of his gas laws on the basis of expert witnesses of his air-pump experiments were in accordance with the post-Cromwell rebellion regime of governance. By emphasising the disinterestedness of his witness accounts, Boyle turned the political issues of the *horror vacui* into a purely scientific affair over which society had no say.[39] As such, they suggested, Boyle had already embodied the liberal image of science. Similarly, in his influential work *Trust in Numbers* (1995), Theodore Porter described the rise of statistical practices as part of the replacement of charismatic forms of politics by bureaucratic forms of authority (to frame it in a Weberian sense). Finding new common ground in a plural and dispersed modern society could only occur on the basis of seemingly neutral figures and calculations.[40]

Building on a 1970s discourse of emancipation and critical theory, STS scholars read the issue of the democratisation of scientific expertise as that of the emancipation of epistemic perspectives excluded by science. Poignant critiques of science in its liberal conception emphasised the situatedness of knowledge and its reliance on local experiences. Feminist scholars such as Donna Harraway and Evelyn Fox Keller, for example, analysed how science presented its knowledge claims as universal, disembodied, and from a God's-eye view, whilst in reality, its facts were produced by local practices of embodied scientists in laboratories working with specific forms of rationality, each with their own history. What was taken as the universal view was, when

39 Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton, NJ: Princeton University Press, 1985).
40 Theodore M. Porter, *Trust in Numbers* (Princeton, N.J: Princeton University Press, 1996). See also: Geoffrey C. Bowker and Susan Leigh Star, *Sorting Things Out: Classification and Its Consequences* (Cambridge, MA: MIT Press, 2000); Alain Desrosières, *The Politics of Large Numbers: A History of Statistical Reasoning*, trans. Camille Naish (Cambridge, MA: Harvard University Press, 2010).

placed under closer historical scrutiny, actually the view of upper-class, Western, white men. Hiding its situatedness, science excluded or denounced forms of knowledge that did not fit its masculine Western capitalist manifestation.[41] It was therefore the task of STS to democratise science in such a manner that the excluded voices could be heard in the formation of scientific knowledge.

The usual platforms of democratisation such as parliament and the courts were not the vehicles for this emancipatory programme, not least as they were far too bound up with the liberal state and its (equally) liberal conception of science. The authority of parliament and the courts was, in the liberal image, like science itself, dependent on a plurality of hidden actors. Thus, STS had to go straight to the source, and involve these invisible institutions.[42] Consequently, STS in effect became an investigation of the many other forms of democratic participation, from citizen councils to patient organisations and new social movements.[43] This progressive discourse against state power and the scientific elite went hand in hand with the rediscovery of civil society and citizenship as an alternative to state-centred politics in the 1990s. The emphasis STS placed on extra-parliamentary actors had, for example, much in common with Mark Bovens' idea of the relocation of politics (as discussed in section 6.4). As discussed in the last chapter, suspicion against the state and trust in local bottom-up initiatives were grist to the neoliberal mill of transferring state tasks and responsibilities to the market. This was an ironic occurrence, since STS had always protested against neoliberal science regimes, yet the public accountability of science that STS wished for ultimately came in the form of an economic disciplinary regime

---

41 Evelyn Fox Keller, *Reflections on Gender and Science* (New Haven: Yale University Press, 1986); Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Feminist Studies* 14, no. 3 (1988): 575–99, https://doi.org/10.2307/3178066.

42 For example: Bruno Latour, *The Making of Law: An Ethnography of the Conseil d'Etat* (Cambridge, UK: Polity, 2009).

43 Brian Wynne, "May the Sheep Safely Graze? A Reflexive View on the Expert-Lay Divide," in *Risk, Environment and Modernity: Towards a New Ecology*, Theory, Culture & Society (London: SAGE Publications Ltd, 1996); Harry M. Collins and Robert Evans, "The Third Wave of Science Studies: Studies of Expertise and Experience," *Social Studies of Science* 32, no. 2 (2002): 235–96; Michel Callon, Pierre Lascoumes, and Yannick Barthe, *Acting in an Uncertain World: An Essay on Technical Democracy*, trans. Graham Burchell (Cambridge, MA: The MIT Press, 2011); Noortje Marres, "The Issues Deserve More Credit: Pragmatist Contributions to the Study of Public Involvement in Controversy," *Social Studies of Science* 37, no. 5 (October 1, 2007): 759–80, https://doi.org/10.1177/0306312706077367.

that focussed more on the output of science.[44]

The intellectual development of STS mirrors that of planning as described in this thesis and the development of political philosophy as analysed by Forrester. The critique on the state as a source of accumulated power and suppression transformed over time into the search for alternative sites of politics. The driving force behind this development was a reduction of the state in its capacity as an administrative and surveillance apparatus. The term for civil servants in 18th-century German-speaking counties was *Geheimrat*, the archetype of the bureaucrat that would go on to haunt modern political thought.[45] It signals the private nature of bureaucratic knowledge. If the state consisted of the practices of the *Geheimrat*, it lacked the public nature necessary for politics (*Geheim* meaning secret). The state as a set of administrative practices could therefore never be the proper place for politics, and it could never be a public sphere. If science was historically intrinsically linked with the private practices of the state, STS sought to bring science into the open by seeking public forums. Conversely, STS never denounced these administrative practices. STS scholars did not slander state administration and science as "instrumental reason," like their colleagues from critical theory had done.[46] Administrative practices, just like science, were not based on hard universal rules of rationality, but rather on flexible reason and locally grounded forms of knowledge.[47] Porter, Shapin, and Shaffer's assessment of scientific authority in politics was never meant to be purely negative. After all, science made a modern form of politics possible where pluralism stood central.[48] It is this image of administrative practices upon which I have relied arguably the most when describing the planning practices of the Dutch

44 Philip Mirowski and Esther-Mirjam Sent, "The Commercialization of Science, and the Response of STS," in *The Handbook of Science and Technology Studies*, ed. Edward Hackett et al. (Cambridge, MA: MIT Press, 2007), 635–89.

45 Theodore M. Porter, "Revenge of the Humdrum: Bureaucracy as Profession and as a Site of Science," *Journal for the History of Knowledge* 1, no. 1 (2020): 18, pp. 1–5, https://doi.org/10.5334/jhk.20.

46 For example: Jürgen Habermas, "Technology and Science as 'Ideology,'" in *Towards a Rational Society: Student Protest, Science and Politics* (Boston, MA: Beacon Press, 1970), 81–122; cf. Andrew Lewis Feenberg, "Concretizing Simondon and Constructivism: A Recursive Contribution to the Theory of Concretization," *Science, Technology, & Human Values* 42, no. 1 (January 1, 2017): 62–85, https://doi.org/10.1177/0162243916661763.

47 Porter, "Revenge of the Humdrum," 4.

48 See also: Ad Maas, "Johan Rudolph Thorbecke's Revenge: Objectivity and the Rise of the Dutch Nation State," ed. Jeroen Van Dongen and Herman Paul, Bos-

Central Planning Bureau—not as a manifestation of instrumental reason, but as locally grounded practices, flexible enough to constantly adapt to new political situations.

The critique of the liberal image of science functioned on two levels. STS scholars argued that science did not function as the liberal idea imagined: First, it was neither neutral, nor bound to the disinterested rules of instrumental rationality. Second, it was a critique of the attitude of the scientists who would use this image to establish their authority in the political arena—who would use it as a shield with which to fend off complex political issues. In other words, scientists presented themselves as simply communicators of scientific facts and laws that functioned in the same manner, irrespective of political conviction. It was with this latter attitude that Latour took issue when he denoted "the laws of nature" as the supreme arbiter of political matters.[49] However, by criticising the liberal image in this manner, STS scholars paid less attention to the diversity and ambiguities of the liberal image, especially where that image did not rely on neutrality. As I have argued in this thesis, although planners appealed to the liberal image of science to a certain extent, they did not exclude political concerns from their scientific practices.

Already from the very start, planners such as Otto Neurath and Jan Tinbergen were aware of the democratic critique on planning. Accounting for these critiques, planning in the Dutch tradition has always sought to democratically justify its privileged position in the institution of the state. Moreover, by doing so, planners actively wanted to carve out a space within the planning process for political decisions unbound by scientific laws of instrumental rationality. Democratic input on the planning process was just as important as the epistemic justification of planning decisions themselves. However, the resulting image of democracy and the involvement of citizens was still a world away from what STS scholars considered ideal. Most of this discrepancy revolved around the communicative ideal of science. As discussed in the third chapter, Ragnar Frisch considered the discussions and negotiations between employers and unions as crucial to the planning process: Planning had a responsibility to facilitate a good discussion. However, in Tinbergen's and Henri Thiel's work for the CPB, these negotiations were

---

ton Studies in the Philosophy and History of Science 321 (Cham: Springer, 2017), 173–93.

49  Latour, *Facing Gaia*, 46.

reduced to the aggregation of economic and political preferences. The planning ideal of the 1970s, in contrast, was closer to what critics of planning, such as Habermas, had in mind when they spoke about the communication of science. Planning was not simply an aggregation of preferences, but an enhancement of the political agency of the individual.

In this manner, planning theory gave shape to what democratic legitimisation actually entailed in a given planning process. When politicians made decisions in the planning process, they were not only bound by the expertise of the planners, but also by democratic legitimisation. In other words, instead of a liberal image of politics designating the place of scientists as arbiters on specific political issues, planning created an image in which expertise, political decisions, and democratic deliberation and participation were assigned a designated role.

Throughout this thesis, I have attempted to understand the dynamics between science and the state in terms of Sheila Jasanoff's *sociotechnical imaginaries*. With this notion, Jasanoff wanted to stress the role of science in creating a (national) understanding of (a future) society.[50] I have striven here to apply the same principle to the state, investigating what science adds to a consciousness, or rather the image, of the state—which is historically speaking, the liberal image of the state. In this regard, I would argue, planning, and the social sciences in general, not only designate what the place of science within the state should be, but also established its own authority through the state.

The study of scientific expertise by STS scholars and philosophers of science has often taken the shape of questions: When is it responsible to delegate political issues to scientists? When is the trust in experts wise and on what is this trust built? Finally, in so far as complete delegation is not wise, how can science be included in political deliberation if not as arbiters?

---

50 Sheila Jasanoff, "Future Imperfect: Science, Technology, and the Imaginations of Modernity," in *Dreamscapes of Modernity Sociotechnical Imaginaries and the Fabrication of Power*, ed. Sheila Jasanoff and Sang- Hyun Kim (Chicago: University of Chicago Press, 2015). Jasanoff has not been alone in this effort to reinvestigate the relationship between science and the state. For example, see: Gabrielle Hecht and Paul N Edwards, eds., *The Technopolitics of Cold War: Toward a Transregional Perspective* (Washington, DC: American Historical Association, 2007). For the mixed results of these investigations, see: Nicholas J Rowland and Jan-Hendrik Passoth, "Infrastructure and the State in Science and Technology Studies," *Social Studies of Science* 45, no. 1 (February 1, 2015): 137–45, https://doi.org/10.1177/0306312714537566.

[51] Scientific authority in these questions is often conceived as a question of the prestige or legitimacy of science or the scientist in society, or the trust generally put in scientific experts dealing with complex and technical issues. Without wanting to denounce the relevance of these questions, I would argue that what is missing in this framing is how science gains authority in relation to the state.

In their important work *The Paradox of Scientific Authority* (2009), Wiebe Bijker, Roland Bal, and Ruud Hendriks attempted to tackle this question in reference to the boundary practices performed by scientists—in their case, by the experts of the Dutch Health Council. Paradoxically, Bijker, Bal, and Hendriks argue, to allow their advice to appear independent from the complex political interest that surround the issues on which they advise, scientific experts are engaged in inevitable political struggles behind the scenes.[52] Willem Halffman has applied this argument to the practices of the CPB, arguing that the economic experts negotiate with policymakers which issues are up for (democratic) debate and which are not. This boundary practice allows for enough flexibility for policymakers to frame issues in the manner they prefer, but also for experts to bind policymakers to the outcomes of the models they employ.[53] In these cases, the authority of scientists is established through their proximity to the state apparatus, yet at the same time, making a clear distinction between scientific authority and that of the state through political negotiations.

In addition, I would like to advance another point that is not spelt out in these studies, namely that science gains its authority from the authority of the state, not only because scientists negotiate this authority with state actors, but also because the decision of the scientist concurs with the decision of the state. In other words, if the decision of the planner is in accordance with that of the policymaker, the scientific decision is authoritative. As Claude Lefort argued, the state is considered authoritative in so far it represents the symbolic order of the whole society, irrespective of whether

---

51 See the works op. cit. note 43

52 Wiebe E. Bijker, Roland Bal, and Ruud Hendriks, *The Paradox of Scientific Authority: The Role of Scientific Advice in Democracies* (Cambridge, MA: The MIT Press, 2009); Gürol Irzık and A. Faik Kurtulmu , "Votes and Lab Coats: Democratizing Scientific Research and Science Policy," *Metascience* 22, no. 1 (March 1, 2013): 45–61, https://doi.org/10.1007/s11016-012-9718-6.

53 Willem Halffman, "Measuring the Stakes: The Dutch Planning Bureaus," in *Scientific Advice to Policy Making: International Comparison* (Opladen, DE: Verlag Barbara Budrich, 2009), 41–65.

that symbolic order is derived from a sovereign decision, the norms of the law, or public opinion.[54] As I have argued, the modern state needs scientific planning for its authority since it denotes the decisions of the state as reflections of the general will or public opinion. However, the reverse is also true, as science also needs the state for its authority in society. State decisions provide science with a certain stature. In Lefort's terms, scientific authority is the institutionalisation of the symbolic order of the state in a specific sphere. It gives scientists the authority to make decisions within this sphere and to act as an arbiter on specific issues. It is not the individual citizen that delegates their power to scientific experts, or puts their trust into science. Rather, it is the state as the collective representative of a political community that does so. In this manner, the state is vital for its ability to create a normative order in which science is to be trusted and scientific facts hold authority.

As discussed in the first chapter, Carl Schmitt feared that the scientific sphere would become the designated place for politics in the technological age—in Latour's terms, that science would become the ultimate arbiter.[55] Political authority, he argued, would disappear, since this form of authority was founded on the souvereign's decisions on the friend enemy distinction and could not be bound to any higher principles. This image of politics and science clearly does not hold for the reciprocal relationship between science and the state that I have tried to describe. In contrast to Schmitt's fears, this appears not to undermine the normative order that state decisions can establish. Here Lefort's analysis of the same problem is perhaps more apt, namely that, in the modern democratic age, the symbolic order was not derived from the decisions of the sovereign (as he had already been beheaded), but instead a product of the imaginary of society. Society thus imagines the symbolic order of the state to adhere to findings of scientific conduct. At the same time, those findings are only authoritative through the institutionalisation of the state's symbolic order in a scientific sphere.[56] This process of institutionalisation consists of setting up universities, elite institutes for the training of policymakers and engineers, scientific societies and journals.

---

54 Claude Lefort, "Outline of the Genesis of Ideology in Modern Societies," in *The Political Forms of Modern Society* (Cambridge, MA: MIT Press, 1986), 184.
55 Carl Schmitt, "The Age of Neutralization and Depolitization," in *The Concept of the Political*, trans. George Schwab (Chicago: The University of Chicago Press, 2007), 80–96.
56 Claude Lefort, "The Permanence of the Theologico-Political?" in *Democracy and Political Theory*, trans. David Macey (Cambridge, UK: Polity, 1988), 244.

Within such sphere the scientist gains the ability to speak about specific scientific matters with authority.[57] I have tried to catch a similar dynamic in my notion of the decisionist imaginary. Planning is a crucial factor in the imaginary of the symbolic order of the state, distributing the authority of the state, science, and civil society. Moreover, planners are authoritative experts in sofar they succeed in establishing their forecasts as frameworks for state action.

Contrary to Lefort, I have argued that the crux of this imaginary of society is the decision of the state. By building a system of accreditation and setting-up advisory councils, the state's decisions play an important role in designating which scientific institutions are authoritative. I therefore share the decisionist conviction that the decisions of the state are the alpha and omega of modern politics. Situating the state's decisions within a social imaginary does not cancel out the state's autonomy. The rules and conduct of science cannot establish authority on their own; they cannot supersede the authority of the state, as Schmitt's fear for technocracy implied. Consequently, an imaginary produced by science, as planning clearly is, does not undermine the decisions of the state. On the contrary, it establishes state decisions in modern politics as the source of authority from which science derives its own authority.

This misconception often lies at the heart of controversies surrounding scientific authority or trust in the modern sciences. Governments can hide behind science, claiming that it does not act on the authority of the state, but on the authority of scientific experts, or that in reality it was scientists that made the decisions of state—in short, technocracy. However, without the source of the state's authority, science does not have the power to stand on its own. In such a situation, its claims become vulnerable to denunciation. When Latour claims that the laws of nature no longer function as the ultimate arbiter, I would argue he defines precisely this problem. Ironically, it is often the state that hides behind the liberal image of science, not the scientists themselves. I would suggest that fake news, climate deniers, anti-vaxxers, and the generally eroding trust in public institutions are not the primary factors in the declining authority of science. Rather, cynical politicians erode this authority when they attempt to escape responsibility for their own choices by passing that responsibility to science. Although I do not want to

---

57  Johan Heilbron, "A Regime of Disciplines: Toward a Historical Sociology of Disciplinary Knowledge," in *The Dialogical Turn: New Roles for Sociology in the Postdisciplinary Age—Essays in Honor of Donald N. Levine*, ed. Charles Camic and Hans Joas (Lanham: Rowman & Littlefield Publishers, 2004), 23–42.

claim that fake news and the like are not a problem on their own, the role of the state in these matters is often missing in public discourse.

This issue of politicians disowning the decisions of the state returns again and again in the critical discourse surrounding the CPB. The part played by the experts of the CPB in their role of forming a consensus in Dutch politics is often attacked for its emphasis on the wrong indicators, especially economic growth. The critique by Willem Schinkel that I quoted in the introduction is a good example of this.[58] The scientific expertise of the CPB is responsible for making the growth of GDP into an "objective" indicator, contributing to the unquestioned authority of such indicators. However, as I already pointed out above, GDP is only part of the rules the CPB puts into place in order to give shape to the game of finding a consensus: It ensures that the deliberations of the social partners or cabinet formations are "games" with a definitive outcome. Quite why every political organisation in the Netherlands wants to play this game is another matter. Time and time again political parties announce with much fanfare they will not play along. Yet they will most likely only do so when they know there is nothing to gain from participating. If they smell a chance of victory, political parties are often very willing to take the gamble. That is not to say that the rules of the CPB are fair; they are often rigged in the interest of capital. The game, however, remains primarily attractive since it hides the decisions of the state. The outcomes of consensus-seeking deliberations appear not to be the responsibility of the state. Rather, the responsibility is shared amongst the representative elites of the parties involved. These parties are bound to each other's decisions; they share in the same fate and therefore are unlikely to break ranks. Blaming the expertise of the CPB for the outcomes is, in such a scenario, the easy way out, since they do not appear to be representatives of anyone—the CPB cannot even, as Latour has argued, be the representative of the laws of science or the economy. This is not the fault of the models of the CPB: They are often the outcomes of complex and hidden political deliberation themselves. It is rather the fault of politicians, unions, and business representatives who grant those models scientific authority through the hidden decisions of the state that they attempt to influence. However, they

---

58 I have myself also voiced a similar point of critique on the models of the CPB in my writings. The following should therefore not be understood as disproval of these critiques. Rather, it is an attempt to see them in a larger context and built upon this critique. See: Tom Kayzel, "De Ideologie van het macro-economisch model," *Wijsgerig Perspectief Op Maatschappij En Wetenschap* 58, no. 2 (2018).

have little interest to carry responsibility for these decisions, and instead hide state decisions behind those of science.

Yet does not absolves the CPB of blame for the current Dutch political predicament—it is just that their models are an easy target. As I have shown in this thesis, planning actively contributed to an image of politics in which the decisions of the state were less and less relevant, or were purposefully hidden away. The politicians could only escape their responsibility thanks to the image of the state that planning had created. However, as I also showed, planning has a long history throughout the 20th century that has often emphasised the decisions of the state. A return to more state-oriented political thought and practice can go hand in hand with planning, and probably cannot do without a planning programme. If history is to return to politics (which, in the light of problems such as global warming and global pandemics seems inevitable)—if we indeed manage through political action to herald the future once more—then thinking about planning and the state is essential.

# References

*Archives*

Noord-Hollands Archief, Haarlem
- *Wiener Kreis Archief,* nummer toegang 373

Nationaal Archief, The Hague
- *Ministerie van Economische Zaken: Centraal Planbureau*, nummer toegang 2.06.093
- *Wetenschappelijke Raad voor het Regeringsbeleid*, nummer toegang 2.03.07
- *Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer: Centrale Raden voor de Milieuhygiëne*, nummer toegang 2.17.08
- *Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer: Raad voor het Milieubeheer*, nummer toegang 2.17.12
- *Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer: Nationaal Milieubeleidsplan*, nummer toegang 2.17.10
- *Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer: Nationaal Milieubeleidsplan Plus*, nummer toegang 2.17.11

## Literature

Abma, Ruud. "Het Plan van de Arbeid en de SDAP." *BMGN - Low Countries Historical Review* 92, no. 1 (1977): 37–68.

Achterhuis, Hans. *De markt van welzijn en geluk*. Amsterdam: Uitgeverij Ambo, 1979.

———. *De utopie van de vrije markt*. Rotterdam: Lemniscaat, 2010.

———. "Stuurman verdwaalt soms in labyrint van staatsdebat." *De Volkskrant*. March 1, 1986.

———. "Taal verhult gebrekkig denkvermogen." *Het Parool*. April 12, 1986.

Adorno, Theodor W. *Minima moralia: reflections from damaged life*. Translated by E. F. N Jephcott. London: Verso, 1978.

Advisory Group on the Social Sciences. *Social Science and Government: Policies and Problem*. Paris: OECD, 1966.

Akhabbar, Amanar, Gabrielle Antille, Emilio Fontela, and Antonio Pulido. "Input-Output in Europe: Trends in Research and Applications." *Oeconomia* 1, no. 1 (2011): 73–98. https://doi.org/10.4000/oeconomia.1843.

Albeda, Will. *Participatie, arbeid en maatschappij*. Alphen aan den Rijn: Samsom B.V., 1976.

Alberts, Gerard. "De opkomst van het wiskundig modelleren." *Nieuw Archief voor Wiskunde* 5, no. 1 (2000): 59–67.

———. *Jaren van berekening: Toepassingsgerichte initiatieven in de Nederlandse wiskundebeoefening, 1945-1960*. Amsterdam: Amsterdam University Press, 1998.

———. "On Connecting Socialism and Mathematics: Dirk Struik, Jan Burgers, and Jan Tinbergen." *Historia Mathematica* 21, no. 3 (August 1994): 280–305.

———. "Wiskunde en wederopbouw: Deskundigen en hun prometheïsche huiver." *Gewina: Tijdschrift voor de Geschiedenis der Geneeskunde, Natuurwetenschappen, Wiskunde en Techniek* 24, no. 4 (2001): 242–58.

Alblas, Wilfred, and Herman Sips. "Voortgaande keuzes." *Tijdschrift voor politieke ekonomie* 18, no. 4 (1995): 93–99.

Alexander, James. "Review of 'Michael Oakeshott and the Cambridge School on the History of Political Thought' by Martyn P. Thompson." *Cosmos + Taxis* 8, no. 2–3 (2020): 66–83.

Algazi, Gadi. "Exemplum and Wundertier: Three Concepts of the Scholarly Persona." *BMGN - Low Countries Historical Review* 131, no. 4 (2016): 8–32. https://doi.org/10.18352/bmgn-lchr.10262.

Almodovar, António, and Pedro Teixeira. "The Ascent and Decline of Catholic Economic Thought, 1830–1950s." *History of Political Economy* 40, no. 5 (2008): 62–87. https://doi.org/10.1215/00182702-2007-060.

Amadae, Sonja M. *Rationalizing Capitalist Democracy: The Cold War Origins of Rational Choice Liberalism*. Chicago: University of Chicago Press, 2003.

Anderson, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso, 1983.

Anderson, Perry. "Dégringolade." *London Review of Books*, September 2, 2004. https://www.lrb.co.uk/the-paper/v26/n17/perry-anderson/degringolade.

Andersson, Jenny. "Prediction and Social Choice: Daniel Bell and Future Research." In *The Decisionist Imagination: Sovereignty, Social Science, and Democracy in the 20th Century*, edited by Daniel Bessner and Nicolas Guilhot, 250–71. New York: Berghahn Books, 2019.

———. "The Future of the Western World: The OECD and the Interfutures Project." *Journal of Global History* 14, no. 1 (2019): 126–44. https://doi.org/10.1017/S1740022818000384.

———. *The Future of the World, Futurology, Futurists, and the Struggle for the Post-Cold War Imagination*. Oxford: Oxford University Press, 2018.

———. "The Great Future Debate and the Struggle for the World." *The American Historical Review* 117, no. 5 (December 2012): 1411–30. https://doi.org/10.1093/ahr/117.5.1411.

Andersson, Jenny, and Anne-Greet Keizer. "Governing the Future: Science, Policy and Public Participation in the Construction of the Long Term in the Netherlands and Sweden." *History and Technology* 30, no. 1–2 (April 3, 2014): 104–22. https://doi.org/10.1080/07341512.2014.932563.

Andersson, Jenny, and Eglė Rindzeviciūtė. "The Political Life of Prediction: The Future as a Space of Scientific World Governance in the Cold War Era." *Les Cahiers Européens de Sciences Po* Vol. 4 (December 2012).

———, eds. *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*. London: Routledge, 2015.

Andeweg, Rudy B. "Coalition Politics in the Netherlands: From Accommodation to Politicization." *Acta Politica* 43, no. 2 (July 1, 2008): 254–77. https://doi.org/10.1057/ap.2008.8.

Angner, Erik. *A Course in Behavioral Economics*. 2nd ed. London: Palgrave Macmillan, 2016.

Ankersmit, F. R. "Political Representation and Political Experience: An Essay on Political Psychology." *Redescriptions: Political Thought, Conceptual History and Feminist Theory* 11, no. 1 (January 1, 2007): 21–44. https://doi.org/10.7227/R.11.1.3.

———. *Sublime Historical Experience*. Stanford, CA: Stanford University Press, 2005.

Arendt, Hannah. "Preface: The Gap between Past and Future." In *Between Past and Future: Six Exercises in Political Thought*, 3–15. New York: Viking Press, 1961.

———. "The Concept of History: Ancient and Modern." In *Between Past and Future: Six Exercises in Political Thought*, 41–90. New York: Viking Press, 1961.

———. *The Human Condition*. Chicago: University of Chicago Press, 1958.

———. *The Origins of Totalitarianism*. New York: Schocken Books, 1951.

———. "What Is Authority?" In *Between Past and Future: Six Exercises in Political Thought*, 91–142. New York: Viking Press, 1961.

———. "What Is Freedom?" In *Between Past and Future: Six Exercises in Political Thought*, 143–72. New York: Viking Press, 1961.

Armitage, David. "In Defense of Presentism." In *History and Human Flourishing*, edited by

Darrin McMahon. Oxford: Oxford University Press, 2021.

Aron, Raymond. *Introduction to the Philosophy of History: An Essay on the Limits of Historical Objectivity*. Boston, MA: Beacon Press, 1961.

Arrow, Kenneth J. "A Difficulty in the Concept of Social Welfare." *Journal of Political Economy* 58, no. 4 (1950): 328–46. https://doi.org/10.1086/256963.

Ashbery, John. *And the Stars Were Shining*. New York: Farrar Straus Giroux, 1994.

Asperen, Trudy van. "Met de beste bedoelingen… Over de ideologie van de verzorgingsstaat." In *Het bedachte leven: beschouwingen over maatschappij, zingeving en ethiek*, 11–30. Amstedam: Boom, 1993.

Assmann, Aleida. *Is Time out of Joint?: On the Rise and Fall of the Modern Time Regime*. Translated by Sarah Clift. Ithaca: Cornell University Press, 2020.

Bachelard, Gaston. *The New Scientific Spirit*. Translated by Arhtur Goldhammer. Boston, MA: Beacon Press, 1984.

Backhouse, Roger E. "MIT and the Other Cambridge." *History of Political Economy* 46, no. annual suppl. (2014): 252–71. https://doi.org/10.1215/00182702-2716190.

Backhouse, Roger E., and Tamotsu Nishizawa. "Introduction: Towards a Reinterpretation of the History of Welfare Economics." In *No Wealth but Life: Welfare Economics and the Welfare State in Britain, 1880–1945*, 1–22. Cambridge, UK: Cambridge University Press, 2010.

Bakker, Gert P. "Origin and Development of the Dutch National Accounts." In *The Accounts of Nations*. Amsterdam: IOS Press, 1994.

Ball, Terence. "American Political Science in Its Postwar Political Context." In *Discipline and History: Political Science in the United States*, edited by James Farr and Raymond Seidelman, 207–21. Ann Arbor: University of Michigan Press, 1993.

Bambach, Charles R. *Heidegger, Dilthey, and the Crisis of Historicism*. Ithaca: Cornell University Press, 1995.

Baneke, David. "Synthetic Technocracy: Dutch Scientific Intellectuals in Science, Society and Culture, 1880-1950." *The British Journal for the History of Science* 44, no. 1 (March 2011): 89–113. https://doi.org/10.1017/S000708741000004X.

———. *Synthetisch denken: Natuurwetenschappers over hun rol in een moderne maatschappij, 1900-1940*. Hilversum: Uitgeverij Verloren, 2008.

Barten, Anton. "The History of Dutch Macroecnomic Modelling (1936—1986)." In *Challenges for Macroeconomic Modelling*, 39–88. Contributions to Economic Analysis 178. Amstedam: North-Holland, 1988.

Bastani, Aaron. *Fully Automated Luxury Communism*. New York: Verso, 2019.

Beck, Ulrich. *Risk Society: Towards a New Modernity*. London: SAGE Publications Ltd, 1992.

Beck, Ulrich, Anthony Giddens, and Scott Lash. *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order*. Cambridge, UK: Polity, 1994.

Becker, Tobias. "Rückkehr der Geschichte? Die »Nostalgie-Welle« in den 1970er und 1980er Jahren." In *Zeitenwandel: Transformationen Geschichtlicher Zeitlichkeit Nach Dem Boom*, edited by Fernando Esposito, 93–117. Göttingen: Vandenhoeck & Ruprecht, 2017.

Becker, Uwe, and Corina Hendriks. "'As the Central Planning Bureau Says': The Dutch Wage Restraint Paradigm, Its Sustaining Epistemic Community and Its Relevance for Comparative Research." *Review of International Political Economy* 15, no. 5 (December 2008): 826–50. https://doi.org/10.1080/09692290802403486.

Beckert, Jens. *Imagined Futures: Fictional Expectations and Capitalist Dynamics.* Cambridge, MA: Harvard University Press, 2016.

Behrent, Michael C. "Liberalism without Humanism: Michel Foucault and the Free-Market Creed, 1976–1979." *Modern Intellectual History* 6, no. 3 (November 2009): 539–68. https://doi.org/10.1017/S1479244309990175.

Beiser, Frederick C. *After Hegel: German Philosophy, 1840—1900.* Oxford: Oxford University Press, 2014.

———. *The German Historicist Tradition.* Oxford: Oxford University Press, 2011.

———. "Weimar Philosophy and the Fate of Neo-Kantianism." In *Weimar Thought: A Contested Legacy*, edited by Peter E. Gorden and John P. McCormick, 115–32. Princeton, NJ: Princeton University Press, 2013.

Bell, Daniel. *The Coming of Post-Industrial Society: A Venture in Social Forecasting.* New York: Basic Books, 1976.

———. *The End of Ideology: On the Exhaustion of Political Ideas in the Fifties.* New York: Free Press, 1960.

———. "Twelve Modes of Prediction: A Preliminary Sorting of Approaches in the Social Sciences." *Daedalus* 93, no. 3 (1964): 845–80.

Bemelmans-Videc, Marie-Louise. "Economen in Overheidsdienst: Bijdragen van Nederlandse Economen aan de Vorming van het Sociaal-Economische beleid, 1945-1975." PhD thesis, Erasmus University Rotterdam, 1984.

Benanav, Aaron. *Automation and the Future of Work.* New York: Verso, 2020.

Benthem van den Bergh, Godfried van. "Technologie en ongelijkheid." *De Gids* 134, no. 9–10 (1971): 527–29.

Berman, Elizabeth Popp. "Not Just Neoliberalism: Economization in US Science and Technology Policy." *Science, Technology, & Human Values* 39, no. 3 (2014): 397–431. https://doi.org/10.1177/0162243913509123.

Berman, Marshall. *All That Is Solid Melts into Air: The Experience of Modernity.* New York: Penguin, 1988.

Bernal, John Desmond. *The World, the Flesh and the Devil: An Enquiry into the Future of the Three Enemies of the Rational Soul.* London: Kegan Paul, Trench, Trubner & Co., 1929.

Bernays, Edward L. *Crystallizing Public Opinion.* New York: Liveright Publishing Corporation, 1923.

Bernstein, Michael A. *A Perilous Progress: Economists and Public Purpose in Twentieth-Century America.* Princeton, N.J: Princeton University Press, 2001.

Bernstein, Michael A., and Allen Hunter. "The Cold War and Expert Knowledge: New Essays on the History of the National Security State: Editors' Introduction." *Radical History Review* 63, no. 1 (1995): 1–6. https://doi.org/10.1215/01636545-1995-63-1.

Bessner, Daniel, and Nicolas Guilhot, eds. *The Decisionist Imagination: Sovereinity, Social Science and Democracy in the 20th Century*. New York: Berghahn, 2019.

———. "Who Decides?" In *The Decisionist Imagination: Sovereignty, Social Science, and Democracy in the 20th Century*, edited by Daniel Bressner and Nicolas Guilhot, 1–25. New York: Berghahn Books, 2019.

Beunder, Alexander, Bas Van Beek, Merel De Buck, and Jilles Mast. "Hoe Frits Böttcher met steun van tientallen bedrijven de basis legde voor de klimaatscepsis in Nederland." *De Volkskrant*. February 22, 2020.

Beus, Jos de. "Economisch Burgerschap: een ideaal zonder beweging." In *De Staat van de Burger: Beschouwingen over Hedendaags Burgerschap*, edited by Jan-Baptiste Simonis, Anton Hemerijck, and Percy Lehning, 121–43. Beleid en Maatschappij Jaarboek 1991. Amsterdam: Boom uitgevers, 1992.

Bevernage, Berber. "The Past Is Evil/Evil Is Past: On Retrospective Politics, Philosophy of History, and Temporal Manichaeism." *History and Theory* 54, no. 3 (2015): 333–52. https://doi.org/10.1111/hith.10763.

Bhuta, Nehal. "The Mystery of the State: State Concept, State Theory and State Making in Schmitt and Oakeshott." In *Law, Liberty and State: Oakeshott, Hayek and Schmitt on the Rule of Law*, edited by David Dyzenhaus and Thomas Poole, 10–37. Cambridge, UK: Cambridge University Press, 2015. https://doi.org/10.1017/CBO9781316144930.002.

Biebricher, Thomas. "Neoliberalism and Democracy." *Constellations* 22, no. 2 (June 2015): 255–66. https://doi.org/10.1111/1467-8675.12157.

———. *The Political Theory of Neoliberalism*. Stanford, CA: Stanford University Press, 2018.

Bijker, Wiebe E., Roland Bal, and Ruud Hendriks. *The Paradox of Scientific Authority: The Role of Scientific Advice in Democracies*. Cambridge, MA: The MIT Press, 2009.

Bjerkholt, Olav. "Frisch's Econometric Laboratory and the Rise of Trygve Haavelmo's Probability Approach." *Econometric Theory* 21, no. 3 (June 2005): 491–533. https://doi.org/10.1017/S0266466605050309.

———. "Interaction between Model Builders and Policy Makers in the Norwegian Tradition." *Economic Modelling* 15, no. 3 (July 1998): 317–39. https://doi.org/10.1016/S0264-9993(98)00015-7.

———. "The Making of the Leif Johansen Multi-Sectoral Model." *History of Economic Ideas* 17, no. 3 (2009): 103–26.

Bjerkholt, Olav, and Steinar Strøm. "Decision Models and Preferences: The Pioneering Contributions of Ragnar Frisch." In *Constructing and Applying Objective Functions*, edited by Andranik Tangian. Heidelberg: Springer, 2002.

Blok, Aad. "Jan Tinbergen en de Nederlandse Sociaaldemokratische Ideologie." In *Distantie en engagement : Jan Tinbergen*, edited by Gerard Alberts and Pieter Weeder, 9–36. Eindhoven: Technische Universiteit Eindhoven, 1988.

Blyth, Mark. *Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century*. Cambridge, UK: Cambridge University Press, 2002.

Bockman, Johanna. *Markets in the Name of Socialism: The Left-Wing Origins of Neoliberalism*. Stanford, CA: Stanford University Press, 2011.

Bod, Rens, Jeroen Van Dongen, Sjang L. ten Hagen, Bart Karstens, and Emma Mojet. "The Flow of Cognitive Goods: A Historiographical Framework for the Study of Epistemic Transfer." *Isis* 110, no. 3 (September 2019): 483–96. https://doi.org/10.1086/704673.

Boekema, E. "Investeringen, werkgelegenheid, arbeidsinkomensquote en rendement." *Economische Statistische Berichten* 59, no. 2975 (October 30, 1974): 962–63.

Boer, Fokke de. "Spreadsheets and GIS in Integral Modeling." In *Informatik Für Den Umweltschutz*, 549–56. 5. Symposium Wien, Osterreich, 19.-21. September 1990 Proceedings. Berlin / Heidelberg: Springer-Verlag, 1990.

Bogaard, Adrienne van den. *Configuring the Economy; The Emergence of a Modelling Practice in the Netherlands, 1920—1955*. Amsterdam: Thela-Thesis, 1997.

———. "De verwevenheid tussen Toekomstverkenning en Beleid." Werkdocument. The Hague: Wetenschappelijke Raad voor het Regeringsbeleid, January 2002.

———. "Economie als wiskundige abstractie of als uitdrukking van zingeving? Strijdende visies bij het ontstaan van het centraal planbureau." *Gewina: Tijdschrift voor de Geschiedenis der Geneeskunde, Natuurwetenschappen, Wiskunde en Techniek* 24 (2001): 225–41.

———. "Past Measurment and Fututre Prediction." In *Models as Mediators, Perspectives on Natural and Social Science*. Cambridge, UK: Cambridge University Press, 1999.

———. "The Cultural Origins of the Dutch Economic Modeling Practice." *Science in Context* 12, no. 02 (June 1999). https://doi.org/10.1017/S0269889700003458.

Boianovsky, Mauro. "Modeling Economic Growth: Domar on Moving Equilibrium." *History of Political Economy* 49, no. 3 (September 2017): 405–36. https://doi.org/10.1215/00182702-4193008.

Boianovsky, Mauro, and Kevin D. Hoover. "In the Kingdom of Solovia: The Rise of Growth Economics at Mit, 1956-70." *History of Political Economy* 46, no. suppl_1 (December 1, 2014): 198–228. https://doi.org/10.1215/00182702-2716172.

———. "The Neoclassical Growth Model and Twentieth-Century Economics." *History of Political Economy* 41, no. Supplement (2009): 198–228. https://doi.org/10.1215/00182702-2009-013.

Bolhuis, Wimar. *De rekenmeesters van de politiek: de doorberekening van de verkiezingsprogramma's van het cpb*. Amsterdam: Van Gennep, 2017.

Boltanski, Luc, and Eve Chiapello. *The New Spirit of Capitalism*. Translated by Gregory Elliott. London: Verso, 2007.

Boomkens, René. "Filosoferen in de marge van de zachte sector." *Krisis: Tijdschrift voor Actuele Filosofie* 1, no. 2 (October 1980): 12–19.

Borg, Maarten ter, Maurits Henkemans, and Erik-Jan Klijn. *Toekomst van de verzorgingsstaat: Een aanzet tot een radikale visie*. Tweede en herziene druk. Xeno: Groningen, 1980.

Borowy, Iris. "Negotiating Environment: The Making of the OECD Environment Committee and the Polluter Pays Principle, 1968–1972." In *The OECD and the International Political Economy Since 1948*, edited by Matthieu Leimgruber and Matthias Schmelzer, 311–34. Cham: Palgrave Macmillan, 2017.

Bos, Frits. "The Dutch Fiscal Framework: History, Current Practice and the Role of the Cen-

tral Planning Bureau." *OECD Journal on Budgeting* 8, no. 1 (2008): 1–42.

Boucher, Ellen. "Anticipating Armageddon: Nuclear Risk and the Neoliberal Sensibility in Thatcher's Britain." *The American Historical Review* 124, no. 4 (October 2019): 1221–45. https://doi.org/10.1093/ahr/rhz744.

Boumans, Marcel. "Build-in Justifications." In *Models as Mediators: Perspectives on Natural and Social Science.* Ideas in Context. Cambridge, UK: Cambridge University Press, 1999.

———. "De contstructie van de samenleving; Tinbergen en de vroege planning." *Beleid en Maatschappij* 16, no. 5 (1989): 230–45.

———. "De Slinger van Tinbergen." *Tijdschrift voor politieke ekonomie* 13 (1990): 50–65.

———. "Vertrouwen in Economische Modellen." In *Onzekerheid Troef: Het Betwiste gezag van de Wetenschap*, edited by Huub Dijstelbloem and Rob Hagendijk, 115–36. Amsterdam: Van Gennep, 2011.

Boumans, Marcel, and Neil de Marchi. "Models, Measurement, and 'Universal Patterns': Jan Tinbergen and Development Planning without Theory." *History of Political Economy* 50, no. S1 (2018): 231–48. https://doi.org/10.1215/00182702-7033956.

Bourg, Julian. *From Revolution to Ethics: May 1968 and Contemporary French Thought.* Montreal: McGill-Queen's University Press, 2007.

Bovens, Mark. "Burgerschap of burgerzin?" *Beleid & Maatschappij* 18, no. 3 (May 1991): 113–14.

Bovens, Mark, Wim Derksen, Willem Witteveen, Frans Becker, and Paul Kalma. *De verplaatsing van de politiek: Een agenda voor democratische vernieuwing.* Amsterdam: Wiardi Beckman Stichting, 1995.

Bowker, Geoffrey C., and Susan Leigh Star. *Sorting Things Out: Classification and Its Consequences.* Cambridge, MA: MIT Press, 2000.

Breslau, Daniel. "Economics Invents the Economy: Mathematics, Statistics, and Models in the Work of Irving Fisher and Wesley Mitchell." *Theory and Society* 32, no. 3 (June 1, 2003): 379–411. https://doi.org/10.1023/A:1024480118264.

Breslau, Daniel, and Yuval Yonay. "Beyond Metaphor: Mathematical Models in Economics as Empirical Research." *Science in Context* 12, no. 2 (ed 1999): 317–32. https://doi.org/10.1017/S0269889700003446.

Brick, Howard. "The End of Ideology Thesis." In *The Oxford Handbook of Political Ideologies*, edited by Michael Freeden and Marc Stears, 91–111. Oxford: Oxford University Press, 2013. https://doi.org/10.1093/oxfordhb/9780199585977.013.0033.

———. *Transcending Capitalism: Visions of a New Society in Modern American.* Ithaca: Cornell University Press, 2006.

Broek, Ilja Maria van den. *Heimwee naar de politiek : De herinnering aan het kabinet-Den Uyl.* Amsterdam: Wereldbibliotheek, 2002.

Broman, Thomas. "The Habermasian Public Sphere and 'Science *in* the Enlightenment.'" *History of Science* 36, no. 2 (June 1998): 123–49. https://doi.org/10.1177/007327539803600201.

Brown, Wendy. *In the Ruins of Neoliberalism: The Rise of Antidemocratic Politics in the West.* New York: Columbia University Press, 2019.

———. *Undoing the Demos: Neoliberalism's Stealth Revolution*. New York: Zone Books, 2015.

Brugman, Hendrik. *Handboek voor het Plan van de Arbeid*. Amsterdam: Arbeiderspers, 1936.

Buchanan, James M., and Gordon Tullock. *The Calculus Of Consent: Logical Foundations of Constitutional Democracy*. Ann Arbor: University of Michigan Press, 1962.

Buevink, Jan, and Paul den Hoed. "Interview Theo Quené." In *Op de brug tussen wetenschap en politiek: WRR 35 jaar*, 15–21. Amsterdam: Amsterdam University Press, 2007.

———. *Op de brug tussen wetenschap en politiek: WRR 35 jaar*. Amsterdam: Amsterdam University Press, 2007.

Burgin, Angus. *The Great Persuasion: Reinventing Free Markets since the Depression*. Cambridge, MA: Harvard University Press, 2015.

Butter, Frank den. "Macroeconomic Modelling and the Policy of Restraint in the Netherlands." *Economic Modelling* 8, no. 1 (January 1991): 16–33. https://doi.org/10.1016/0264-9993(91)90019-K.

———. "The Industrial Organisation of Economic Policy Preperation in the Netherlands." In *The Politics of Scientific Advice: Institutional Design for Quality Assurance*, edited by Justus Lentsch and Peter Weingart, 177–214. Cambridge, UK: Cambridge University Press, 2011.

Butter, Frank den, and Mary S. Morgan, eds. *Empirical Models and Policy-Making: Interaction and Institutions*. London: Routledge, 2000.

———. "What Makes the Models-Policy Interaction Successful?" *Economic Modelling* 15 (1998): 443–75.

Çalışkan, Koray, and Michel Callon. "Economization, Part 1: Shifting Attention from the Economy towards Processes of Economization." *Economy and Society* 38, no. 3 (August 2009): 369–98. https://doi.org/10.1080/03085140903020580.

———. "Economization, Part 2: A Research Programme for the Study of Markets." *Economy and Society* 39, no. 1 (February 2010): 1–32. https://doi.org/10.1080/03085140903424519.

Callinicos, Alex. "Social Theory Put to the Test of Practice: Pierre Bourdieu and Anthony Giddens." *New Left Review*, no. I/236 (August 1, 1999): 77–102.

Callon, Michel. "An Essay on Framing and Overflowing: Economic Externalities Revisited by Sociology." In *The Laws of Markets*, 244–69. Sociological Review Monographs. Oxford: Blackwell Publishers, 1998.

———. *The Laws of the Markets*. Oxford: Blackwell Publishers, 1998.

———. "What Does It Mean to Say That Economics Is Performative?" In *Do Economists Make Markets? : On Rhe Performativity of Economics, Eds. D. Mackenzie, F. Muniesa, and L. Siu.*, 311–57. Princeton, NJ: Princeton University Press, 2007.

Callon, Michel, Pierre Lascoumes, and Yannick Barthe. *Acting in an Uncertain World: An Essay on Technical Democracy*. Translated by Graham Burchell. Cambridge, MA: The MIT Press, 2011.

Camphuis, Willem. "Tussen analyse en opportuniteit: De SER als adviseur voor de loon- en prijspolitiek." PhD thesis, Radboud Universiteit Nijmegen, 2009.

Carr, Danielle Judith Zola. "'Ghastly Marionettes' and the Political Metaphysics of Cognitive

Liberalism: Anti-Behaviourism, Language, and the Origins of Totalitarianism." *History of the Human Sciences* 33, no. 1 (2020): 147–74. https://doi.org/10.1177/0952695119874009.

Cartwright, Nancy, Jordi Cat, and Thomas Uebel. *Otto Neurath: Philosophy between Science and Politics*. Cambridge, UK: Cambridge University Press, 1996.

Castoriadis, Cornelius. *The Imaginary Institution of Society*. Translated by Kathleen Blamey. Cambridge, MA: The MIT Press, 1998.

Cat, Jordi. "The Popper-Neurath Debate and Neurath's Attack on Scientific Method." *Studies in History and Philosophy of Science* 26, no. 2 (1995): 219–50.

Cetina, Karin Knorr, and A. V. Cicourel, eds. *Advances in Social Theory and Methodology*. Hoboken: Routledge, 1981.

Chakrabarty, Dipesh. "Anthropocene Time." *History and Theory* 57, no. 1 (2018): 5–32. https://doi.org/0.1111/hith.12044.

Chang, Hasok. "Beyond Case-Studies: History as Philosophy." In *Integrating History and Philosophy of Science*, 109–24. Boston Studies in the Philosophy of Science. Dordrecht: Springer, 2011. https://doi.org/10.1007/978-94-007-1745-9_8.

———. "History and Philosophy of Science as a Continuation of Science by Other Means." *Science & Education* 8, no. 4 (July 1, 1999): 413–25. https://doi.org/10.1023/A:1008650325798.

Chao, Hsiang-Ke, and Harro Maas. "Thinking and Acting with Diagrams." *East Asian Science, Technology and Society* 14, no. 2 (June 1, 2020): 191–97. https://doi.org/10.1215/18752160-8537965.

Chappel, James. *Catholic Modern: The Challenge of Totalitarianism and the Remaking of the Church*. Cambridge, MA: Harvard University Press, 2018.

———. "The Catholic Origins of Totalitarianism Theory in Interwar Europe." *Modern Intellectual History* 8, no. 3 (November 2011): 561–90. https://doi.org/10.1017/S1479244311000357.

Charles, Loïc. "The Visual History of the Tableau Économique." *The European Journal of the History of Economic Thought* 10, no. 4 (December 1, 2003): 527–50. https://doi.org/10.1080/0967256032000137702.

Charles, Loïc, and Yann Giraud. "Economics for the Masses: The Visual Display of Economic Knowledge in the United States (1910—45)." *History of Political Economy* 45, no. 4 (November 1, 2013): 567–612. https://doi.org/10.1215/00182702-2369931.

———. "Seeking the 'Museum of the Future': Public Exhibitions of Science, Industry, and the Social, 1910–1940." *History of Science* 59, no. 2 (2021): 133–54.

Cherrier, Beatrice. "How to Write a Memo to Convince a President: Walter Heller, Policy-Advising, and the Kennedy Tax Cut." *Oeconomia* 9, no. 2 (June 2019): 315–35. https://doi.org/10.4000/oeconomia.5714.

Cherrier, Beatrice, and Jean-Baptiste Fleury. "Economists' Interest in Collective Decision after World War II: A History." *Public Choice* 172, no. 1–2 (2017): 23–44. https://doi.org/10.1007/s11127-017-0410-7.

Christofferson, Michael Scott. "An Antitotalitarian History of the French Revolution: François

Furet's Penser La Revolution Française in the Intellectual Politics of the Late 1970s." *French Historical Studies* 22, no. 4 (Fall 1999): 557–611. https://doi.org/10.2307/286759.

Ciepley, David. *Liberalism in the Shadow of Totalitarianism*. Cambridge, MA: Harvard University Press, 2006.

Clark, Christopher. *Iron Kingdom: The Rise and Downfall of Prussia, 1600–1947*. London: Penguin, 2007.

———. *Time and Power: Visions of History in German Politics, From the Thirty Years' War to the Third Reich*. Princeton, NJ: Princeton University Press, 2019.

Clavaux, F.J. "Enkele kwantitatieve aspecten van de Nederlandse werkloosheid." *Economische en Statistische Berichten* 60, no. 2984 (January 8, 1975): 31–34.

Colander, David. "Retrospectives: Edgeworth's Hedonimeter and the Quest to Measure Utility." *Journal of Economic Perspectives* 21, no. 2 (June 2007): 215–26. https://doi.org/10.1257/jep.21.2.215.

Colla, Marcus. "The Spectre of the Present: Time, Presentism and the Writing of Contemporary History." *Contemporary European History* 30, no. 1 (February 2021): 124–35. https://doi.org/10.1017/S096077732000048X.

Collins, Harry M., and Robert Evans. "The Third Wave of Science Studies: Studies of Expertise and Experience." *Social Studies of Science* 32, no. 2 (2002): 235–96.

Collins, Jacob. "A Metaphysics of Democracy." *New Left Review*, no. 74 (April 1, 2012): 145–54.

Commissie Rathenau. *Rapport van de adviesgroep micro-elektronica*. The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1980.

Commissie tot vergelijkend onderzoek van politieke systemen, SDAP. *Het staatkundig stelsel der Sociaal-Democratie*. Amsterdam: Arbeiderspers, 1935.

Cooper, Melinda. *Family Values: Between Neoliberalism and the New Social Conservatism*. New York: Zone Books, 2017.

CPB, Centraal Planbureau. *Centraal Economisch Plan 1949*. The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1949.

———. *Centraal Economisch Plan 1952*. The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1952.

———. *Economie en milieu: op zoek naar duurzaamheid*. The Hague: SDU Uitgeveri, 1996.

———. *Economische gevolgen van voorgenomen milieubeleid, een tijdpadanalyse*. CPB Monografieën 23. The Hague: Centraal Planbureau, 1982.

CPB, Centraal Planbureau, and Rijksinstituut voor Volksgezondheid en Milieu RIVM. *Duurzame Economische Ontwikkelings-Scenario's (DEOS) voor Nederland in 2030*. Zoetermeer: Distributiecentrum VROM, 1996.

Crowther-Heyck, Hunter. *Herbert A. Simon: The Bounds of Reason in Modern America*. Baltimore: Johns Hopkins University Press, 2005.

Cuppen, A.J. "Nogmaal: hoezeer bedreigd moderne staat democratie." *NRC Handelsblad*. January 28, 1978.

Daalder, Hans. "Over standvastigheid en lafhartigheid in de academie: Een geschiedenis van de "zaak-Daudt." In *Echte Politicologie. Opstellen over politicologie, democratie en de Nederlandse politiek*, edited by Hans Daudt, 40–86. Amsterdam: Bert Bakker, 1995.

———. *Universitair panopticum: Herinneringen van een gewoon hoogleraar*. Amsterdam: Arbeiderspers, 1997.

Dalen, Harry van, and Arjo Klamer. *Telgen van Tinbergen: Het verhaal van de Nederlandse economen*. Amsterdam: Balans, 1996.

Dam, Peter van. "Een wankel vertoog: Over ontzuiling als karikatuur." *Low Countries Historical Review* 126 (3) (2011): 52–77.

Dam, Peter van, Jouke Turpijn, and Bram Mellink, eds. *Onbehagen in de polder: Nederland in conflict sinds 1795*. Amsterdam: Amsterdam University Press, 2014.

Daston, Lorraine. "Calculation and the Division of Labor, 1750—1950." *Bulletin of the German Historical Institute* 62 (Spring 2018): 9–30.

———. "On Scientific Observation." *Isis* 99, no. 1 (March 2008): 97–110. https://doi.org/10.1086/587535.

———. "When Science Went Modern." *The Hedgehog Review* 18, no. 3 (Fall 2016).

———. "When Was Modernity, and Why Do We Care?" In *The Moderns: Wie Sich Das 20. Jahrhundert in Kunst Und Wissenschaft Erfunden Hat*, edited by Cathrin Pichler and Susanne Neuburger, 143–59. Vienna: Springer, 2012.

Daston, Lorraine J., and Peter Galison. *Objectivity*. New York: Zone Books, 2007.

Daston, Lorraine, and H. Otto Sibum. "Introduction: Scientific Personae and Their Histories." *Science in Context* 16, no. 1 (2003): 1–8. https://doi.org/10.1017/S026988970300067X.

Daudt, Hans. "De politieke toekomst van de verzorgingsstaat." In *De stagnerende verzorgingsstaat*, edited by Jacques van Doorn and Kees Schuyt, 189–218. Amsterdam: Boom uitgevers, 1978.

———. *Enige recente ontwikkelingen in de wetenschap der politiek*. Leiden: H.E. Stenfert Kroese, 1963.

———. "Het Politieke Gedrag." In *Politiek*, edited by Lucas van der Land, 1:182–204. Repertorium van de Sociale Wetenschappen. Amsterdam: Elsevier, 1958.

———. "Legimiteit en legitimatie." *Beleid en Maatschappij* 2, no. 1 (January 1975): 5–16.

———. *Pressiegroepen in de EEG*. Vol. 3. Europese Monografieën. Deventer: N.V. Uitgeversmaatschappij Æ. E. Kluwer, 1965.

———. "Probleemstelling nader omlijnd." In *Bedreigde Democratie: Parlementaire democratie en overheidsbemoeienis in de economie*, edited by Hans Daalder and Ed van der Wolk, 4–13. Assen: Van Gorcum, 1978.

———. "Problemen bij de coalitievorming in de Nederlandse politiek." *Socialisme en Democratie* 34, no. 3 (March 1977): 99–105.

———. "Verzorgingsstaat, democratie en socialisme." In *Het eerste jaarboek voor het democratisch socialisme*, 14–40. Amsterdam: De Arbeiderspers, 1979.

Daudt, Hans, and Douglas Rae. "The Ostrogorski Paradox: A Peculiarity of Compound Majority Decision." *European Journal of Political Research* 4, no. 4 (1976): 391–98. https://doi.org/10.1111/j.1475-6765.1976.tb00542.x.

Daudt, Hans, and Ed Van der Wolk, eds. *Bedreigde democratie? : parlementaire democratie en overheidsbemoeienis in de economie*. Assen: Van Gorcum, 1978.

De Man, Hendrik. *The Psychology of Socialism*. London: George Allen & Unwin, 1928.

De Vooys, Isaäc Pieter. "De economische taak van den ingenieur na den oorlog." *De Ingenieur* 32 (1917): 598–611.

Deetman, Wim. Staatkundige, bestuurlijke en staatsrechtelijke vernieuwing, Kamerstukken II, 1990–1991, 21427, no. 3 (1990).

Dekker, Erwin. "Entangled Economists: Ragnar Frisch and Jan Tinbergen." *Erasmus Journal for Philosophy and Economics* 12, no. 2 (Winter 2019): 65–85. https://doi.org/10.23941/ejpe.v12i2.451.

———. "On Emancipators, Engineers, and Students: The Appropriate Attitude of the Economist." *The Review of Austrian Economics* 33, no. 1 (March 1, 2020): 55–68. https://doi.org/10.1007/s11138-019-00439-y.

———. "The Construction of an International Order in The Work of Jan Tinbergen." In *Political Economy and International Order in Interwar Europe*, edited by Alexandre M. Cunha and Carlos Eduardo Suprinyak, 117–38. Cham: Palgrave Macmillan, 2020.

———. "The Socialist Origins of Expert Institutions to Govern the Economy: Jan Tinbergen and the Rise of Economic Expertise." Paper presented at the Building the neoliberal welfare state Workshop, University of Amsterdam, 28 June 2019.

———. *The Viennese Students of Civilization: The Meaning and Context of Austrian Economics Reconsidered*. Cambridge, UK: Cambridge University Press, 2016.

Deleuze, Gilles. "Postscript on the Societies of Control." *October* 59 (1992): 3–7.

Delft, Dirk van. "Paul Ehrenfest's Final Years." *Physics Today* 67, no. 1 (January 2014): 41–47. https://doi.org/10.1063/PT.3.2244.

Den Hartog, Hans, and Hok Soei Tjan. "Investeringen, lonen, prijzen en arbeidsplaatsen: een jaargangenmodel met vaste coëfficienten voor Nederland." *CPB occasional paper* 8 (1974).

Derrida, Jacques. *Of Grammatology*. Translated by Gayatri C. Spivak. Baltimore: Johns Hopkins University Press, 1997.

Desrosières, Alain. "How to Make Things Which Hold Together: Social Science, Statistics and the State." In *Discourses on Society: The Shaping of the Social Science Disciplines*, edited by Peter Wagner, Björn Wittrock, and Richard P. Whitley, 195–218. Dordrecht: Kluwer, 1990.

———. "Managing the Economy." In *The Modern Social Sciences*, 7:553–64. The Cambridge History of Science. Cambridge, UK: Cambridge University Press, 2003.

———. *The Politics of Large Numbers: A History of Statistical Reasoning*. Translated by Camille Naish. Cambridge, MA: Harvard University Press, 2010.

Diepen, Loran van, Rosa Kösters, Moria van Dijk, and Matthias van Rossum. "Flexland in Wording. De Reactie En Strategie van de Vakbeweging Ten Aanzien van Flexibilisering in Nederland, 1980-1990." *TSEG, Low Countries Journal of Social and Economic History* 18, no. 1 (2020): 109–45.

Dijstelbloem, Huub. *De democratie anders : politieke vernieuwing volgens Dewey en Latour*. Enschede: Self Published, 2007.

Dirks, Jan. "Vraagstukken van socialistiese ekonomie." *De Socialistische Gids* XIV, no. 6 (June 1929): 528–40.

Dix, Guus. "Microeconomic Forecasting: Constructing Commensurable Futures of Educational Reforms." *Social Studies of Science* 49, no. 2 (March 2019): 180–207. https://doi.org/10.1177/0306312719837364.

Doel, Hans van den. *Het biefstuksocialisme en de economie*. 2nd ed. Utrecht: Uitgeverij Het Spectrum, 1979.

Doel, Hans van den, Cees de Galan, and Jan Tinbergen. "Pleidooi voor een geleide loonpolitiek." *Economische en Statistische Berichten* 61, no. 3044 (1976): 264–68.

Doel, Hans van den, Han Lammers, Arie Van der Hek, Reinier Krooshof, André Van der Louw, Tom Pauka, Rob de Rooi, and Arie van der Zwan. *Tien over rood: Uitdagingen van Nieuw Links aan de PvdA*. Amsterdam: Polak & Van Gennep, 1966.

Don, Henk. "How Econometric Models Help Policy Makers- Theory and Practice." *De Economist* 152, no. 2 (2004): 177–95.

———. "The Influence of Jan Tinbergen on Dutch Economic Policy." *De Economist* 167, no. 2 (February 2019).

Don, Henk, and Johan Verbruggen. *Models and Methods for Economic Policy: 60 Years of Evolution at CPB*. CPB Discussion Paper 55. The Hague: CPB Netherlands Bureau for Economic Policy Analysis, 2006.

Donders, Jan, and Johan Graafland. "CPB Models and Employment Policy in the Netherlands." *Economic Modelling* 15 (1998): 341–56.

Doorn, Jacques van. "Corporatisme en technocratie." *Beleid en Maatschappij* 8, no. 5 (1981): 134–49.

———. "Maatschappelijke krachten achter regulering: Een rechtssociologische bijdrage." *Beleid & Maatschappij* 9, no. 8 (1982): 182–89.

Douben, Nic. *Vermogende Arbeid*. Inaugural Lecture. Nijmegen: Tegelen, 1975.

Drees Jr., Willem. *Inkomensverdeling en Overhiedsuitgave*. inaugural address: University of Rotterdam. Haarlem: De Erven F. Bohn B.V., 1963.

———. *On the Level of Government Expenditure in the Netherlands after the War*. Aspecten Der Economische Politiek, III. Leiden: Stenfert Kroese, 1955.

———. "Pre-advies van Dr. W. Drees Jr." In *Inflatiebestrijding: Wenselijkheid en Mogelijkheid*, 1–38. Preadviezen van de Vereniging voor de Staathuishoudkunde. The Hague: Martinus Nijhoff, 1957.

Dreyfus, Hubert, and Paul Rabinow. *Michel Foucault: Beyond Structuralism and Hermeneutics*. Chicago: University Of Chicago Press, 1982.

Driehuis, Wim. "An Analysis of the Impact of Demand and Cost Factors on Employment." *De Economist* 127, no. 2 (1979): 255–86.

———. "Socialistisch beleid en economische analyse." *Socialisme en Democratie* 34, no. 5 (May 1977): 224–33.

Driehuis, Wim, and Arie Van der Zwan, eds. *De Voorbereidingen van het Economisch Beleid Kritisch Bezien*. Leiden: H.E. Stenfert Kroese BV, 1978.

———. "De Voorbereidingen van het economisch beleid kritisch bezien (Part I & II)." *Economische en Statistische Berichten* 62, no. 3119 & 3120 (August 31, 1977).

Dryzek, John S., James Farr, and Stephen T. Leonard, eds. *Political Science in History: Research Programs and Political Traditions*. Cambridge, UK: Cambridge University Press, 1995.

Duijn, G. van. *The Concequences of the Introduction of Unemployment Insurance*. CPB Monographs 1. The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1952.

Duisenberg, Wim. "Een alternatief verkiezingsprogram." *Socialisme en Democratie* 33, no. 5 (May 1976): 211–24.

Dupont-Kieffer, Ariane. "Ragnar Frisch's 'Circulation Planning': An Attempt at Modelling General Equilibrium." *Œconomia: History, Methodology, Philosophy* 2, no. 3 (2012): 281–303. https://doi.org/10.4000/oeconomia.1308.

Düppe, Till, and E. Roy Weintraub. "Siting the New Economic Science: The Cowles Commission's Activity Analysis Conference of June 1949." *Science in Context* 27, no. 3 (2014): 453–83. https://doi.org/10.1017/S0269889714000143.

Dupré, Sven, and Geert Somsen. "The History of Knowledge and the Future of Knowledge Societies." *Berichte Zur Wissenschaftsgeschichte* 42, no. 2–3 (September 2019): 186–99. https://doi.org/10.1002/bewi.201900006.

Dutilh Novaes, Catarina. "Carnap Meets Foucault: Conceptual Engineering and Genealogical Investigation." University of St Andrews, 2020.

Duyvendak, Jan Willem. *De Planning van Ontplooiing: Wetenschap, politiek en de maakbare samenleving*. Nederlandse Cultuur in Europese Context, monografiën en studies 15. The Hague: Sdu Uitgevers, 1999.

Duyvendak, Jan Willem, and Ido de Haan, eds. *Maakbaarheid. Liberale wortels en hedendaagse kritiek van de maakbare samenleving*. Amsterdam: Amsterdam University Press, 1997.

———. "Review van: J. de Beus, Markt, democratie en vrijheid en A. Kinneging, Liberalisme: Een speurtocht naar de filosofische grondslagen." *Krisis: Tijdschrift voor Actuele Filosofie* 40, no. 3 (1990): 80–88.

Duyvendak, Wijnand. *Het Groene Optimisme: Het Drama van 25 Jaar klimaatpolitiek*. Amsterdam: Bert Bakker, 2011.

Dyzenhaus, David. *Legality and Legitimacy: Carl Schmitt, Hans Kelsen and Hermann Heller in Weimar*. Oxford: Oxford University Press, 1999.

Edelstein, Dan. "Red Leviathan: Authority and Violence in Revolutionary Political Culture." *History and Theory* 56, no. 4 (2017): 76–96. https://doi.org/10.1111/hith.12039.

Edelstein, Dan, Stefanos Geroulanos, and Natasha Wheatley. "Chronocenosis: An Introduction to Power and Time." In *Power and Time: Temporalities in Conflict and the Making of History*, 1–49. Chicago: University of Chicago Press, 2020.

———, eds. *Power and Time: Temporalities in Conflict and the Making of History*. Chicago: University of Chicago Press, 2020.

Edwards, Paul N. *The Closed World: Computers and the Politics of Discourse in Cold War America*. Cambridge, MA: MIT Press, 1996.

———. "The World in a Machine: Origins and Impacts of Early Computerized Global Sys-

tems Models." In *Systems, Experts, and Computers: The Systems Approach in Management and Engineering, World War II and After*, edited by Agatha C. Hughes and Thomas P. Hughes, 221–53. Cambridge, MA: MIT Press, 2000.

Elster, Jon. *Sour Grapes: Sour Studies in the Subversion of Rationality*. Cambridge, UK: Cambridge University Press, 1983.

———. *The Cement of Society: A Survey of Social Order*. Cambridge, UK: Cambridge University Press, 1989.

Endenburg, Gerard. *Sociocratie: een redelijk ideaal*. Zaandijk: Woudt, 1975.

Engels, Friedrich. *Anti-Dühring*. London: Wellred, 2017.

Epstein, Steven. "The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials." *Science, Technology, & Human Values* 20, no. 4 (Autumn 1995): 408–37. https://doi.org/10.1177/016224399502000402.

Erickson, Paul. "Mathematical Models, Rational Choice, and the Search for Cold War Culture." *Isis* 101, no. 2 (June 2010): 386–92. https://doi.org/10.1086/653105.

———. *The World the Game Theorists Made*. Chicago: University of Chicago Press, 2015.

Erickson, Paul, Judy L. Klein, Lorraine Daston, Rebecca Lemov, Thomas Sturm, and Michael D. Gordin. *How Reason Almost Lost Its Mind: The Strange Career of Cold War Rationality*. Chicago: University of Chicago Press, 2013.

Esposito, Fernando, ed. *Zeitenwandel: Transformationen Geschichtlicher Zeitlichkeit Nach Dem Boom*. Göttingen: Vandenhoeck & Ruprecht, 2017.

Essen, Rob van. *Kind van de verzorgingsstaat: opgroeien in een tijdloos paradijs*. Amsterdam: Atlas Contact, 2016.

Evans, Peter B., Dietrich Rueschemeyer, and Theda Skocpol, eds. *Bringing the State Back In*. Cambridge, UK: Cambridge University Press, 1985. https://doi.org/10.1017/CBO9780511628283.

Eyal, Gil, and Larissa Buchholz. "From the Sociology of Intellectuals to the Sociology of Interventions." *Annual Review of Sociology* 36, no. 1 (2010): 117–37. https://doi.org/10.1146/annurev.soc.012809.102625.

Fabian, Johannes. *Time and the Other: How Anthropology Makes Its Object*. New York: Columbia University Press, 1983.

Faludi, Andreas, and Arnold Van der Valk. *Rule and Order: Dutch Planning Doctrine in the Twentieth Century*. Dordrecht: Kluwer, 1994.

Fareld, Victoria. "Coming to Terms with the Present Exploring the Chrononormativity of Historical Time." In *Rethinking Historical Time: New Approaches to Presentism*, edited by Marek Tamm and Laurent Olivier, 57–70. London: Bloomsbury Academic, 2019.

Farr, James. "Political Science." In *The Modern Social Sciences*, edited by Theodore M Porter and Dorothy Ross, 7:306–28. The Cambridge History of Science. Cambridge: Cambridge University Press, 2003.

Fase, Martin. "Het economische gedachtegoed van Pieter Hennipman (1911—1994)." *TPEdigitaal* 8, no. 1 (2014): 1–14.

———. "Van eigenzinnig ingenieur naar sociaal econoom: Jan Goudriaan jr. (1893-1974)."

*TPEdigitaal* 8 (3) (2014): 114–27.

Feenberg, Andrew Lewis. "Concretizing Simondon and Constructivism: A Recursive Contribution to the Theory of Concretization." *Science, Technology, & Human Values* 42, no. 1 (January 1, 2017): 62–85. https://doi.org/10.1177/0162243916661763.

Felten, Sebastian, and Christine von Oertzen. "Bureaucracy as Knowledge." *Journal for the History of Knowledge* 1, no. 1 (December 17, 2020): 8. https://doi.org/10.5334/jhk.18.

Fillafer, Franz Leander. "Imperial Diversity, Fractured Sovereignty, and Legal Universals: Hans Kelsen and Eugen Ehrlich in Their Habsburg Context." *Modern Intellectual History* First view (February 1, 2021).

Fisher, Mark. *Capitalist Realism: Is There No Alternative?* Winchester: Zero Books, 2009.

———. "What Is Hauntology?" *Film Quarterly* 66, no. 1 (2012): 16–24. https://doi.org/10.1525/fq.2012.66.1.16.

Fleck, Ludwik. *Genesis and Development of a Scientific Fact*. Edited by Thaddeus J. Trenn and Robert K. Merton. Translated by Frederick Bradley. Chicago: University of Chicago Press, 1981.

Floridi, Luciano. *The Logic of Information: A Theory of Philosophy as Conceptual Design*. Oxford: Oxford University Press, 2019.

Floyd, Jonathan, and Marc Stears, eds. *Political Philosophy versus History?: Contextualism and Real Politics in Contemporary Political Thought*. Cambridge, UK: Cambridge University Press, 2011. https://doi.org/10.1017/CBO9781139003698.

Fockema Andrea, Sijbrandus Johannes. *Een mensenleven in Nederland: driekwart eeuw ontwikkeling van openbaar bestuur, onderwijs en onderneming*. Alphen aan de Rijn: Samsom, 1957.

Fokke, Erik, and Wiemer Salverda. "Kritiek op visie van prof. Stevers." *De Volkskrant*. September 20, 1975.

Fontaine, Philippe. "Other Histories of Recent Economics: A Survey." *History of Political Economy* 48, no. 3 (September 1, 2016): 373–421. https://doi.org/10.1215/00182702-3638607.

Forder, James. "Friedman's Nobel Lecture and The Phillips Curve Myth." *Journal of the History of Economic Thought* 32, no. 3 (September 2010): 329–48. https://doi.org/10.1017/S1053837210000301.

Forman, Paul. "Weimar Culture, Causality, and Quantum Theory, 1918—1927: Adaptation by German Physicists and Mathematicians to a Hostile Intellectual Environment." *Historical Studies in the Physical Sciences* 3 (1971): 1–115. https://doi.org/10.2307/27757315.

Forrester, Jay W. *Industrial Dynamics*. Cambridge, MA: MIT Press, 1961.

———. *Urban Dynamics*. Cambridge, MA: MIT Press, 1969.

Forrester, Katrina. "Hope and Memory in the Thought of Judith Shklar." *Modern Intellectual History* 8, no. 3 (2011): 591–620. https://doi.org/doi:10.1017/S1479244311000369.

———. *In the Shadow of Justice: Postwar Liberalism and the Remaking of Political Philosophy*. Princeton: Princeton University Press, 2019.

Foucault, Michel. "Life: Experience and Science." In *Aesthetics, Method, and Epistemology*,

edited by James Faubion, translated by Robert Hurley, 465–78. Essential Works of Foucault, 1954-1984, Vol. 2. New York: The New Press, 1998.

———. "Nietzsche, Genealogy, History." In *Aesthetics, Method, and Epistemology*, edited by James Faubion, translated by Donald Bouchard and Sherry Simon, 369–91. Essential Works of Foucault, 1954—1984, Vol. 2. New York: The New Press, 1998.

———. *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*. Edited by Colin Gordon. New York: Vintage, 1980.

———. *The Birth of Biopolitics: Lectures at the Collège de France, 1978—1979*. Edited by François Ewald and Arnold I. Davidson. London: Picador, 2010.

———. *The Order of Things: An Archaeology of the Human Sciences*. London: Routledge, 1989.

Fourcade, Marion. *Economists and Societies: Discipline and Profession in the United States, Britain, and France, 1890s to 1990s*. Princeton: Princeton University Press, 2010.

Fourcade, Marion, Etienne Ollion, and Algan Algan. "The Superiority of Economists." *The Journal of Economic Perspectives* Vol. 29, no. 1 (2015): 89–113.

Fox Keller, Evelyn. "Models, Simulation, and 'computer Experiments.'" In *The Philosophy of Scientific Experimentation*, edited by Hans Radder, 198–216. Pittsburgh: University of Pittsburgh Press, 2003.

Friedman, Milton. "The Line We Dare Not Cross." *Encounter*, November 1976.

Frisch, Ragnar. "Co-Operation between Politicians and Econometricians on the Formalization of Political Preferences." In *Economic Planning Studies: A Collection of Essays by Ragnar Frisch*, 41–86. Dordrecht: D. Reidel Pusblising Company, 1976.

———. "From National Accounts To Macro-Economic Decision Models." *The Review of Income and Wealth* 4, no. 1 (March 1955): 1–26. https://doi.org/10.1111/j.1475-4991.1955.tb01063.x.

———. "L'Emploi Des Modèles Pour l'Élaboration d'une Politique Économique Rationelle." *Revue d'Économie Politique* 60, no. 5 (1950): 474–98.

———. "Preface to the Oslo Channel Model: A Survey of Types of Economic Forecasting." In *Economic Planning Studies: A Collection of Essays*, 8:87–127. International Studies in Economics and Econometrics. Dordrecht: D. Reidel Pusblising Company, 1962.

———. "Propagation Problems and Impulse Problems in Dynamic Economics." In *Economic Essays in Honour of Gustav Cassel*. London: Allen & Unwin, 1933. https://doi.org/10.1017/CBO9781139170116.

Fukuyama, Francis. *The End of History and the Last Man*. New York: Free Press, 1992.

Fulda, Daniel. "Historicism as a Cultural Pattern: Practising a Mode of Thought." *Journal of the Philosophy of History* 4, no. 2 (January 1, 2010): 138–53. https://doi.org/10.1163/187226310X509493.

Furet, François. *Interpreting the French Revolution*. Cambridge, UK: Cambridge University Press, 1981.

Furth, D., Arnold Heertje, and Robert Jan van der Veen. "Matiging, structurele werkloosheid en technische ontwikkelingen." *Economische en Statistische Berichten* 62, no. 3090 (February 9, 1977): 128–30.

Gadamer, Hans-Georg. *Truth and Method*. London: Bloomsbury Academic, 2004.

Galan, Cees de. "Politiek En Planning : Opmerkingen n.a.v. Het Rapport van de Commissie Voorbereiding Onderzoek Toekomstige Maatschappijstructuur." *Socialisme En Democratie* 28, no. 1 (1971): 36–42.

———. "Werkloosheid en collectieve bestedingen." *Orbis Eonomicus*, December 1977, 11–18.

Galison, Peter. "Aufbau/Bauhaus: Logical Positivism and Architectural Modernism." *Critical Inquiry* 16, no. 4 (1990): 709–52. https://doi.org/10.1086/448557.

———. "Computer Simulations and the Trading Zone." In *The Disunity of Science: Boundaries, Contexts, and Power*, edited by Peter Galison and David J. Stump, 118–57. Stanford, CA: Stanford University Press, 1996.

———. *Image & Logic: A Material Culture of Microphysics*. Chicago: University of Chicago Press, 1997.

———. "The Ontology of the Enemy: Norbert Wiener and the Cybernetic Vision." *Critical Inquiry* 21, no. 1 (1994): 228–66. https://doi.org/10.1086/448747.

Gentile, Emilio. "Total and Totalitarian Ideologies." In *The Oxford Handbook of Political Ideologies*, edited by Michael Freeden and Marc Stears, 56–72. Oxford: Oxford University Press, 2013. https://doi.org/10.1093/oxfordhb/9780199585977.013.0035.

Geoghegan, Bernard Dionysius. "Textocracy, or, the Cybernetic Logic of French Theory." *History of the Human Sciences* 33, no. 1 (February 2020): 52–79. https://doi.org/10.1177/0952695119864241.

———. "The Historiographic Conceptualization of Information: A Critical Survey." *IEEE Annals of the History of Computing* 30, no. 1 (March 2008): 66–81.

Gerson, Natascha. "Verantwoording? Ja, daag!" *De Groene Amsterdammer*, August 29, 2007.

Ghamari-Tabrizi, Sharon. *The Worlds of Herman Kahn: The Intuitive Science of Thermonuclear War*. Cambridge, MA: Harvard University Press, 2005.

Giddens, Anthony. "'Brave New World: The New Context of Politics." In *Reinventing the Left*, edited by David Miliband. Cambridge, UK: Polity, 1994.

Gieryn, Thomas F. "Boundary-Work and the Demarcation of Science from Non-Science: Strains and Interests in Professional Ideologies of Scientists." *American Sociological Review* 48, no. 6 (1983): 781–95. https://doi.org/10.2307/2095325.

Gilman, Nils. *Mandarins of the Future: Modernization Theory in Cold War America*. Baltimore: The Johns Hopkins University Press, 2007.

Gleason, Abbott. *Totalitarianism: The Inner History of the Cold War*. New York: Oxford University Press, 1997.

Godefroy, Jan. "Toekomst, Wetenschap en Politiek: pleidooi voor een nationale planontwikkelingsraad." The Hague: NRMW, 1970.

———, ed. *welzijnszorg, planning en beleidsvoering: Pleidooi voor een Georganiseerd Toekomstdenken op het gebied van de Welzijnszorg*. The Hague: NRMW, 1972.

Godin, Benoît. "The Linear Model of Innovation: The Historical Construction of an Analytical Framework." *Science, Technology, & Human Values* 31, no. 6 (November 2006): 639–67. https://doi.org/10.1177/0162243906291865.

———. "The New Economy: What the Concept Owes to the OECD." *Research Policy* 33, no. 5 (2004): 679–90. https://doi.org/10.1016/j.respol.2003.10.006.

Goes van Naters, Marinus van der. *Het Staatsbeeld der Sociaaldemocratie*. Amsterdam: De Arbeiderspers, 1930.

Goswami, Manu, Gabrielle Hecht, Adeeb Khalid, Anna Krylova, Elizabeth F. Thompson, Jonathan R. Zatlin, and Andrew Zimmerman. "AHR Conversation: History after the End of History—Reconceptualizing the Twentieth Century." *American Historical Review* 121, no. 5 (December 2016): 1567–1607. https://doi.org/10.1093/ahr/121.5.1567.

Goudzwaard, Bob. *Kapitalisme en Vooruitgang*. Assen: Van Gorcum, 1976.

Graf, Rüdiger. "Either, Or: The Narrative of 'Crisis' in Weimar Germany and in Historiography." *Central European History* 43, no. 4 (December 2010): 592–615. https://doi.org/10.1017/S0008938910000725.

Griensven, Peter van. "Allemaal een stapje terug. Over de bestedingsbeperking van 1951." *Politieke opstellen* 13 (1993): 81–97.

———. "Sociale Zaken: Spanning Tussen Het Sociaal Wenselijke En Economisch Mogelijke." In *Het kabinet-Drees II: In de schaduw van de Koreacrisis*, edited by Jan Ramakers. Parlementaire Geschiedenis Van Nederland Na 1945. Nijmegen: Centrum voor Parlementaire Geschiedenis, 1997.

Griffioen, Sjoerd. "Contested Modernity: Karl Löwith, Hans Blumenberg and Carl Schmitt and the German Secularization Debate." PhD thesis, University of Groningen, 2020.

Griffiths, Richard. "Enkele kanttekeningen bij de eerste industrialisatienota's van J. R. M. van den Brink." *BMGN - Low Countries Historical Review* 101 (1) (1986): 110–17.

Guilhot, Nicolas. "Automatic Leviathan: Cybernetics and Politics in Carl Schmitt's Postwar Writings." *History of the Human Sciences* 33, no. 1 (2020): 128–46. https://doi.org/10.1177/0952695119864244.

———. "Cyborg Pantocrator: International Relations Theory from Decisionism to Rational Choice." *Journal of the History of Behavioral Sciences* 47, no. 3 (Summer 2011): 279–301. https://doi.org/10.1002/jhbs.20511.

Gumbrecht, Hans Ulrich. *Our Broad Present: Time and Contemporary Culture*. New York: Columbia University Press, 2014.

Gunn, J.A.W. "'Public Opinion' in Modem Political Science." In *Political Science in History: Research Programs and Political Traditions*, edited by James Farr, John S. Dryzek, and Robert J. Leonard, 109–22. Cambridge, UK: Cambridge University Press, 1995.

Gunnell, John G. "Political Theory and Politics: The Case of Leo Strauss." *Political Theory* 13, no. 3 (1985): 339–61. https://doi.org/10.1177/0090591785013003002.

———. "The Technocratic Image and the Theory of Technocracy." *Technology and Culture* 23, no. 3 (1982): 392–416. https://doi.org/10.2307/3104485.

Haan, Ido de. "De lachspiegel van het burgerschap." In *De staat van de burger: Beschouwingen over hedendaags burgerschap*, edited by Jan-Baptiste Simonis, Anton Hemerijck, and Percy Lehning, 161–79. Beleid en Maatschappij Jaarboek. Amsterdam: Boom uitgevers, 1992.

———. "Democratie als werk in uitvoering: Pierre Rosanvallon over democratie, representatie en gelijkheid." In *De democratie denken: Werk in uitvoering*, 9–40. Nijmegen: Vantilt, 2019.

———. *Zelfbestuur en staatsbeheer: Het politieke debat over burgerschap en rechtsstaat in de twintigste eeuw*. Amsterdam: Amsterdam University Press, 1993.

Haan, Ido de, and Jan Willem Duyvendak, eds. *In het hart van de verzorgingsstaat: Het ministerie van Maatschappelijk Werk en zijn opvolgers (CRM, WVC, VWS, 1952-2002*. Zutphen: Walburg Press, 2002.

Habermas, Jürgen. "Reflexionen über den Begriff der Politischen Beteiligung." In *Student und Politik: eine soziologische Untersuchung zum politischen Bewusstein Frankfurter Studenten*, edited by Christoph Oehler and Friedrich Weltz, 11–55. Neuwied: Luchterhand Verlag, 1961.

———. *Stichworte zur »Geistigen Situation der Zeit«*. Frankfurt am Main: Suhrkamp, 1979.

———. "Technical Progress and the Social Life-World." In *Towards a Rational Society*, 50–61. Boston, MA: Beacon Press, 1970.

———. *Technik und Wissenschaft als 'Ideologie.'* Frankfurt am Main: Suhrkamp, 1968.

———. "Technology and Science as 'Ideology.'" In *Towards a Rational Society: Student Protest, Science and Politics*, 81–122. Boston, MA: Beacon Press, 1970.

Habermas, Jurgen. *The Philosophical Discourse of Modernity: Twelve Lectures*. Translated by Frederick G. Lawrence. Cambridge, MA: The MIT Press, 1990.

Habermas, Jürgen. "The Scientization of Politics and Public Opinion." In *Towards a Rational Society: Student Protest, Science and Politics*, translated by Jeremy J. Shapiro, 62–80. Boston, MA: Beacon Press, 1970.

———. *The Structural Transformation of the Public Sphere*. Cambridge, UK: Polity, 1989.

———. *Towards a Rational Society: Student Protest, Science and Politics*. Boston, MA: Beacon Press, 1970.

———. "Verwissenschaftlichte Politik und offentliche Meinung." In *Humanität und Politische Verantwortung. Festschrift für Hans Barth*, edited by Richard Reich. Zurich: Erlenbach, 1964.

Hacking, Ian. *Representing and Intervening: Introductory Topics in the Philosophy of Natural Science*. Cambridge, UK: Cambridge University Press, 1983.

Hajer, Maarten. "Policy Without Polity? Policy Analysis and the Institutional Void." *Policy Sciences* 36, no. 2 (June 2003): 175–95. https://doi.org/10.1023/A:1024834510939.

Hajer, Maarten, and Hendrik Wagenaar. "Introduction." In *Deliberate Policy Analysis: Understanding Governance in the Network Society*, edited by Maarten Hajer and Hendrik Wagenaar, 1–30. Cambridge, UK: Cambridge University Press, 2003.

Halberstadt, Victor. *Naar een economische theorie van de publieke sector.* Inaugural Lecture: University of Leiden. Leiden: Universitaire Pers Leiden, 1976.

Halffman, Willem. "Measuring the Stakes: The Dutch Planning Bureaus." In *Scientific Advice to Policy Making: International Comparison*, 41–65. Opladen, DE: Verlag Barbara Budrich, 2009.

Halsmayer, V. "From Exploratory Modeling to Technical Expertise: Solow's Growth Model as a Multipurpose Design." *History of Political Economy* 46, no. Supplement 1 (January 1, 2014): 229–51. https://doi.org/10.1215/00182702-2716181.

Halsmayer, Verena. "A Model to 'Make Decisions and Take Actions.'" *History of Political Economy* 49, no. Annual Suplement (2017).

———. "Following Artifacts." *History of Political Economy* 50, no. 3 (September 1, 2018): 629–34. https://doi.org/10.1215/00182702-7023590.

Halsmayer, Verena, and Kevin D. Hoover. "Solow's Harrod: Transforming Macroeconomic Dynamics into a Model of Long-Run Growth." *The European Journal of the History of Economic Thought* 23, no. 4 (January 2015): 561–96. https://doi.org/10.1080/09672567.2014.1001763.

Hampsher-Monk, Ian, Karin Tilmans, and Frank van Vree. *History of Concepts: Comparative Perspectives*. Amsterdam: Amsterdam University Press, 1998.

Hands, D. Wade. "Paul Samuelson and Revealed Preference Theory." *History of Political Economy* 46, no. 1 (2014): 85–116. https://doi.org/10.1215/00182702-2398939.

Hanf, Kenneth I., Arthur Ringeling, and Katrien Temeer. *Milieubeleid en een veranderende overheid*. Centrale Raad voor de Milieuhygiëne. Zoetermeer: Distributiecentrum VROM, 1993.

Harari, Yuval Noah. *Homo Deus: A Brief History of Tomorrow*. New York: Harper Perennial, 2018.

Haraway, Donna. "Signs of Dominance: From a Physiology to a Cybernetics of Primate Society, C.R. Carpenter, 1930–1970." In *Studies in History of Biology*, 6:129–219. Baltimore: Johns Hopkins University Press, 1983.

———. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14, no. 3 (1988): 575–99. https://doi.org/10.2307/3178066.

Harmsen, Ger. "Bonger, Willem Adriaan." In *Biografisch Woordenboek van het Socialisme en de Arbeidersbeweging in Nederland*, 8:1–7. Amsterdam: Internationaal Instituut voor Sociale Geschiedenis, 2001. http://hdl.handle.net/10622/14811943-2157-4C93-8548-004AA292ACC8.

Harmsma, Jonne. "Voorbij de oude ballast: neoliberalisme en het nieuwe marktdenken van Nederlandse economen (1945-1952)." *Tijdschrift Sociologie* 15, no. 3 (December 1, 2019): 253–70. https://doi.org/10.5117/soc2019.3.002.harm.

Hartog, François. *Regimes of Historicity: Presentism and Experiences of Time*. New York: Columbia University Press, 2015.

Hartog, Hans den, and A. Houweling. *Pollution, pollution abatement and the economic structure- empirical results of input-output computations for the Netherlands*. CPB Occational Papers 7. The Hague: Centraal Planbureau, 1974.

Hartog, Hans den, Hok Soei Tjan, and Theo van de Klundert. "Structurele Ontwikkeling van de Werkgelegenheid in Macro Economisch perspectief." Paper for the Annual Meeting of the Dutch Society of Economics in The Hague, September 1975.

Hartog, Hans den, and J. Weitenberg. "Econometrische modellen en economische politiek (Deel I)." *Economische en Statistische Berichten*, December 21, 1977.

Hartveld, Leo. *De Arbeiders Jeugd Centrale AJC: 1918-1940, 1945-1959*. De Nederlandse arbeidersbeweging 11. Amsterdam: Van Gennep, 1982.

Haslanger, Sally. "Gender and Race: (What) Are They? (What) Do We Want Them To Be?" *Noûs* 34, no. 1 (2000): 31–55. https://doi.org/10.1111/0029-4624.00201.

Hay, Colin. "The Normalizing Role of Rationalist Assumptions in the Institutional Embedding of Neoliberalism." *Economy and Society* 33, no. 4 (November 2004): 500–527. https://doi.org/10.1080/0308514042000285260.

———. *Why We Hate Politics*. Cambridge, UK: Polity, 2007.

Hayek, Friedrich, ed. *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism*. London: G. Routledge sons, ltd., 1935.

Hayek, Friedrich August von. *Road to Serfdom*. London: Routledge, 1944.

Hecht, Gabrielle. *The Radiance of France, New Edition: Nuclear Power and National Identity after World War II*. Cambridge, MA: The MIT Press, 1998.

Hecht, Gabrielle, and Paul N Edwards, eds. *The Technopolitics of Cold War: Toward a Transregional Perspective*. Washington, DC: American Historical Association, 2007.

Heerikhuizen, Bart van. "W.A. Bonger, 1876-1940." *Facta* 4, no. 2 (March 1996): 22–25.

Heertje, Arnold. *Beheersing van de technische ontwikkeling*. Economische Notities 2. Amsterdam: Wiardi Beckman Stichting, 1978.

———. "De miljoenennota en de economische orde." *Economische en Statistische Berichten* 59, no. 2972 (1974): 880–82.

———. "De toekomst van het stelsel." In *De stagnerende verzorgingsstaat*, edited by Jacques Van Doorn and Kees Schuyt, 165–88. Amsterdam: Boom uitgevers, 1978.

———. "De Wisselwerking van economische en technologische ontwikkeling." In *Samenleving en Technologie*, edited by M. Chamalaun and Eric-Jan Tuininga, 16–26. Amsterdam: intermediair, 1979.

———. "Economie, Technische Ontwikkeling en Economie." In *Preadviezen voor de Vereniging van Staathuishoudkunde 1979: Innovatie*. Leiden: H.E. Stenfert Kroese B.V., 1979.

———. "Lonen: Heertje versus Pen." *Het Parool*. December 19, 1970.

———. "Wel micro-electronica, geen micro-economie." *Socialisme en Democratie* 37, no. 2 (February 1980): 76–77.

Heertje, Arnold, Frans Nypels, and Kees Tamboer. *De verwording van de economie voor de arbeider, ondernemer en kruidenier verklaard*. Amsterdam: De Arbeiderspers, 1976.

Hegel, Georg Wilhelm Fredrich. *Phenomenology of Spirit*. Translated by A. V. Miller. Oxford: Oxford University Press, 1977.

———. *Elements of the Philosophy of Right*. Edited by Allen W. Wood. Translated by H. B. Nisbet. Cambridge Texts in the History of Political Thought. Cambridge, UK: Cambridge University Press, 1991. https://doi.org/10.1017/CBO9780511808012.

———. *Introduction to the Philosophy of History: With Selections from The Philosophy of Right*. Translated by Leo Rauch. Indianapolis: Hackett Publishing Company, Inc., 1988.

Heidegger, Martin. *Being and Time*. Translated by John Robinson and Martin Macquarrie.

Oxford: Basil Blackwell, 1962.

———. "The Age of the World Picture." In *The Question Concerning Technology, and Other Essays*, translated by William Lovitt, 115–54. New York: Garland Publishing, Inc., 1977.

———. "The Question Concerning Technology." In *The Question Concerning Technology, and Other Essays*, translated by William Lovitt, 3–35. New York: Garland Publishing, Inc., 1977.

Heijmans, Yannick. "Hart voor het milieu: De ontwikkeling van de milieupolitiek van de PPR, 1968-1989." Master-Thesis, Radboud Universiteit Nijmegen, 2019.

Heilbron, Johan. "A Regime of Disciplines: Toward a Historical Sociology of Disciplinary Knowledge." In *The Dialogical Turn: New Roles for Sociology in the Postdisciplinary Age—Essays in Honor of Donald N. Levine*, edited by Charles Camic and Hans Joas, 23–42. Lanham: Rowman & Littlefield Publishers, 2004.

Hellema, Duco. *Nederland en de jaren zeventig*. Amsterdam: Boom uitgevers, 2012.

Hellema, Duco, and Margriet Van Lith. *Dat hadden we nooit moeten doen: De PvdA en de neoliberale revolutie van de jaren negentig*. Amstedam: Prometheus, 2020.

Hellerma, Juhan. "Koselleck on Modernity, Historik, and Layers of Time." *History and Theory* 59, no. 2 (2020): 188–209. https://doi.org/10.1111/hith.12154.

Hemerijck, Anton, Jan-Baptiste Simonis, and Percy Lehning. "De herontdekte burger." In *De Staat van de Bruger: Beschouwingen over Hedendaags Burgerschap*, 9–24. Beleid en Maatschappij Jaarboek. Amsterdam: Boom uitgevers, 1992.

Hen, Paul Erik de. *Actieve en re-actieve industriepolitiek in Nederland*. Amsterdam: De Arbeiderspers, 1980.

Hendriks, Corina. "The Story behind the Dutch Model: Consensual Politics of Wage Restraint." PhD thesis, University of Amsterdam, 2010.

Hendriks, Gerda Jansen. "De burger in kaart: De Volkstelling in 1971." *Andere Tijden*. Hilversum: NTR & VPRO, October 1, 2011.

Hennipman, Pieter. *De theoretische economie en de wederopbouw*. inaugural address; University of Amsterdam. Amsterdam: Noord-Hollandsche Uitgevers Maatschappij, 1945.

Herfeld, Catherine. "From Theories of Human Behavior to Rules of Rational Choice: Tracing a Normative Turn at the Cowles Commission, 1943–54." *History of Political Economy* 50, no. 1 (2018): 1–48. https://doi.org/10.1215/00182702-4334997.

———. "Imagination Rather than Observation in Econometrics: Ragnar Frisch's Hypothetical Experiments as Thought Experiments." *HOPOS* 9, no. 1 (Spring 2019): 35–74. https://doi.org/10.1086/700197.

———. "The Diversity of Rational Choice Theory: A Review Note." *Topoi* 39 (2020): 329–47. https://doi.org/10.1007/s11245-018-9588-7.

Hermans, Willem Frederik. *De donkere kamer van Damokles*. Amsterdam: G.A. van Oorschot, 1958.

———. *Het sadistische universum*. Amsterdam: De Bezige Bij, 1964.

———. *Ik heb altijd gelijk*. Amsterdam: G.A. van Oorschot, 1951.

———. "Preambule." In *Paranoia*, 7–16. Amsterdam: G.A. van Oorschot, 1953.

Heyck, Hunter. "Producing Reason." In *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature*, 99–116. New York: Palgrave Macmillan, 2012.

Hirschman, Daniel, and Elizabeth Popp Berman. "Do Economists Make Policies? On the Political Effects of Economics." *Socio-Economic Review* 12, no. 4 (October 1, 2014): 779–811. https://doi.org/10.1093/ser/mwu017.

Hobbes, Thomas. *Leviathan*. Edited by Richard Tuck. Cambridge, UK: Cambridge University Press, 1991.

Hobsbawm, Eric. "Red Science." *London Review of Books* 28, no. 5 (March 9, 2006).

Hoed, Paul den. "Een Keur van Raadgevers: Honderd Jaar Vaste Adviescolleges." In *Op Steenworp Afstand: Op de Brug tussen Wetenschap en Politiek*. Amsterdam: Amsterdam University Press, 2007.

Hoed, Paul den, and Anne-Greet Keizer, eds. *Op Steenworp Afstand: Op de brug tussen wetenschap en politiek, WRR 35 jaar*. Amsterdam: Amsterdam University Press, 2007.

Hoffman, Leen. "Struisvolgel Politiek bij Kabinetsformatie." *Het Vrije Volk*. February 8, 1977.

Hoffmann, Stefan-Ludwig. "Koselleck, Arendt, And The Anthropology Of Historical Experience." *History and Theory* 49, no. 2 (May 2010): 212–36. https://doi.org/10.1111/j.1468-2303.2010.00540.x.

Hofstee, Evert Willem. "De toekomst van de Nederlandse samenleving." In *Wegwijzers naar een goed bewoonbaar Nederland : beschouwingen aangeboden aan mr. J. Vink bij zijn afscheid als directeur-generaal van de Rijksplanologische Dienst*, 1–43. Alphen aan den Rijn: Samsom, 1967.

———. "Rapport van de werkgroep uit de contactcommissie Overheid-Sociaal Wetenschappelijke raad." The Hague: Sociaal Wetenschappelijke Raad, June 1965.

Hollanders, David. "Politieke partijen binden zich met CPB-doorrekeningen van partijprogramma's aan invloedrijk staatsorgaan." *Beleid en Maatschappij* 43, no. 2 (2016): 41–43. https://doi.org/10.5553/BenM/138900692016043002005.

Hooven, Marcel ten. "Het Kabinet van de Maagmens." *Trouw*. August 24, 1994.

Hoppe, Rob, and Willem Halffman. "Wetenschappelijke beileidsadvisering in Nederland: Trends en ontwikkelingen." *Beleidswetenschap* 1 (2004): 31–61.

Horkheimer, Max, and Theodor W. Adorno. *Dialectic of Enlightenment*. Edited by Guzelin Schmid Noerr. Translated by Edmund Jephcott. Palo Alto, CA: Stanford University Press, 2002.

Hounshell, David. "The Cold War, RAND, and the Generation of Knowledge, 1946-1962." *27* 2 (1997): 237–67. https://doi.org/10.2307/27757779.

Hounshell, David A. "The Medium Is the Message, or How Context Matters: The Rand Corporation Builds an Economics of Innovation, 1946–1962." In *Systems, Experts, and Computers: The Systems Approach in Management and Engineering, World War II and After*, edited by Agatha C. Hughes and Thomas P. Hughes, 255–310. Cambridge, MA: The MIT Press, 2000.

Hughes, H. Stuart. "The End of Political Ideology." *Measure* 2, no. Spring (1951): 146–58.

Huizinga, Johan. *Homo Ludens*. Boston, MA: Beacon Press, 1955.

Husserl, Edmund. *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*. Translated by David Carr. Evanston, IL: Northwestern University Press, 1970.

———. "The Origin of Geometry." In *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*, translated by David Carr, 353–78. Evanston, IL: Northwestern University Press, 1970.

Hutchins, Edwin. *Cognition in the Wild*. Cambridge, MA: MIT Press, 1995.

Ieven, Bram. "Organiseren voor de toekomst: voorbij het kapitalisme." *De Nederlandse Boekengids*, February 2019.

Iggers, Georg G. "Historicism: The History and Meaning of the Term." *Journal of the History of Ideas* 56, no. 1 (1995): 129–52. https://doi.org/10.2307/2710011.

Illich, Ivan. *Deschooling Society*. New York: Harper & Row, 1971.

———. *Medical Nemesis*. New York: Pantheon Books, 1975.

———. *Tools for Conviviality*. New York: Harper & Row, 1973.

Ingram, James D. "The Politics of Claude Lefort's Political: Between Liberalism and Radical Democracy." *Thesis Eleven* 87, no. 1 (November 1, 2006): 33–50. https://doi.org/10.1177/0725513606068774.

Innset, Ola. *Reinventing Liberalism: The Politics, Philosophy and Economics of Early Neoliberalism (1920-1947)*. Cham: Springer, 2020.

Irzık, Gürol, and A. Faik Kurtulmu . "Votes and Lab Coats: Democratizing Scientific Research and Science Policy." *Metascience* 22, no. 1 (March 1, 2013): 45–61. https://doi.org/10.1007/s11016-012-9718-6.

Isaac, Joel. "Strategy as Intellectual History." *Modern Intellectual History* 16, no. 3 (2019): 1007 1021. https://doi.org/doi:10.1017/S1479244318000094.

———. "Tangled Loops: Theory, History and the Human Sciences in Modern America." *Modern Intellectual History* 6, no. 2 (2009): 397–424. https://doi.org/10.1017/S1479244309002145.

———. "The Human Sciences in Cold War America." *The Historical Journal* 50, no. 3 (2007): 725–46. https://doi.org/10.1017/S0018246X07006334.

———. "Tool Shock: Technique and Epistemology in the Postwar Social Sciences." *History of Political Economy* 42, no. Annual Supplement (2010): 133–64. https://doi.org/10.1215/00182702-2009-075.

———. *Working Knowledge: Making the Human Sciences from Parsons to Kuhn*. Cambridge, MA: Harvard University Press, 2012.

Jabloner, Clemens. "Kelsen and His Circle: The Viennese Years." *European Journal of International Law* 9, no. 2 (January 1, 1998): 368–85. https://doi.org/10.1093/ejil/9.2.368.

Jackson, Ben. "Currents of Neo-Liberalism: British Political Ideologies and the New Right, c.1955–1979." *English Historical Review* cxxxi, no. 551 (August 2016): 823–50. https://doi.org/doi:10.1093/ehr/cew237.

Jainchill, Andrew, and Samuel Moyn. "French Democracy between Totalitarianism and Solidarity: Pierre Rosanvallon and Revisionist Historiography." *The Journal of Modern His-*

*tory* 76, no. 1 (March 2004): 107–54. https://doi.org/10.1086/421186.

Jameson, Fredric. *The Seeds of Time*. New York: Columbia University Press, 1996.

Jansen, Leo, Erik Jurgens, Jan van der Staaten, Maarten ter Borg, Eeltje Talstra, and Marlies Neervoort, eds. *Barsten in de groei: productie en konsumptie tegen de achtergrond van welzijn, derde wereld, milieu en macht*. Baarn: Wereldvenster, 1974.

Jantsch, Erich. *Technological Forecasting in Perspective: A Framework for Technological Forecasting, Its Techniques and Organisation*. Paris: OECD, 1967.

Jasanoff, Sheila. "Future Imperfect: Science, Technology, and the Imaginations of Modernity." In *Dreamscapes of Modernity Sociotechnical Imaginaries and the Fabrication of Power*, edited by Sheila Jasanoff and Sang-Hyun Kim. Chicago: University of Chicago Press, 2015.

———. *Science and Public Reason*. London: Routledge, 2013.

Jasanoff, Sheila, and Sang-Hyun Kim, eds. *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. Chicago: University of Chicago Press, 2015.

Jolink, Albert. *Jan Tinbergen; the Statistical Turn in Economics: 1903–1955*. Rotterdam: Chimes, 2003.

Jones, Caroline A., and Peter Galison, eds. *Picturing Science, Producing Art*. London: Routledge, 1998.

Jones, Daniel Stedman. *Masters of the Universe: Hayek, Friedman, and the Birth of Neoliberal Politics*. Updated edition with a New Foreword edition. Princeton: Princeton University Press, 2014.

Jonker, Ulko. "'Al vinden we geen perfect vaccin: de economie past zich aan, er komt herstel.'" *Het Financieele Dagblad*. October 28, 2020.

Jordheim, Helge. "Against Periodization: Koselleck's Theory of Multiple Temporalities." *History and Theory* 51, no. 2 (2012): 151–71. https://doi.org/10.1111/j.1468-2303.2012.00619.x.

Kaag, Henricus Antonius, Suardus Posthuma, Jan Tinbergen, and Hendrikus Van der Valk. *Kan hier te lande, al dan niet na overheidsingrijpen, een verbetering van de binnenlandse conjunctuur intreden, ook zonder verbetering van onze exportpositie? Welke leering kan ten aanzien van dit vraagstuk worden getrokken uit de ervaringen van andere landen?* Prae-adviezen van de Vereniging voor de Staathuishoudkunde en Statestiek. The Hague: Nijhoff, 1936.

Kadt, Jacques de. "Veertig jaar later." *Socialisme en Democratie* 14, no. 12 (December 1957): 689–704.

Kalma, Paul. *De illusie van de "democratische staat."* WBS Cahiers. Deventer: Kluwer, 1982.

———. "De illusie van de 'op rolletjes lopende staat.'" *Hollands Maandblad* 24, no. 421 (December 1982): 17–21.

———. "Om de beweegelijkheid van de arbeid." In *De Verzorgingsstaat: Slopen of Renoveren?*, edited by Will Albeda and Joop Wemelsfelder, 29–58. Assen: Van Gorcum, 1986.

———. "Recensie van 'Troelstra's nieuwe staat.'" *Socialisme en Democratie* 38, no. 2 (February 1981): 102–7.

Kalma, Paul, and Marnix Krop. "Verzorgingsstaat en klasse(n)compromis." *Socialisme en Democratie* 39, no. 6 (June 1982): 256–73.

Kalma, Paul, and Edwin Wolffensperger. "Grenzen aan de verzorging." *Socialisme en Democratie* 38, no. 7–8 (August 1981): 373–86.

Kantorowicz, Ernst. *The King's Two Bodies: A Study in Mediaeval Political Theology*. Princeton, NJ: Princeton University Press, 1957.

Kautsky, Karl. "Der Staatssozialismus." *Der Sozialdemokrat* 50 (December 8, 1881). https://www.marxists.org/archive/kautsky/1881/state/1-statesoc.htm.

Kayzel, Thomas. "Towards a Politics of Restraint: Public Choice Theory in the Labour Party of the 1970s." *TSEG - The Low Countries Journal of Social and Economic History* 18, no. 1 (2021).

Kayzel, Tom. "A Night Train in Broad Daylight: Changing Economic Expertise at the Dutch Central Planning Bureau 1945—1977." *Œconomia* 9, no. 2 (October 22, 2019): 337–70. https://doi.org/10.4000/oeconomia.5613.

———. "De ideologie van het macro-economisch model." *Wijsgerig Perspectief op Maatschappij en Wetenschap* 58, no. 2 (2018).

Keedus, Liisi. *The Crisis of German Historicism: The Early Political Thought of Hannah Arendt and Leo Strauss*. Cambridge, UK: Cambridge University Press, 2019.

Keller, Evelyn Fox. *Reflections on Gender and Science*. New Haven: Yale University Press, 1986.

Kelly, Duncan. *The State of the Political: Conceptions of Politics and the State in the Thought of Max Weber, Carl Schmitt, and Franz Neumann*. *The State of the Political*. Oxford: Oxford University Press, 2012.

Kennedy, Ellen. "Carl Schmitt and the Frankfurt School." *Telos* 1987, no. 71 (March 20, 1987): 37–66. https://doi.org/10.3817/0387071037.

Kennedy, James. *Building New Babylon: Cultural Change in the Netherlands During the 1960s*. Iowa City: University of Iowa Press, 1995.

———. *Nieuw Babylon in aanbouw: Nederland in de jaren zestig*. Translated by Simone Kennedy-Doornbos. Amsterdam: Boom, 1995.

Keulen, Sjoerd. *Monumenten van Beleid: De wisselwerking tussen Nederlands rijksoverheidsbeleid, sociale wetenschappen en politieke cultuur, 1945-2002*. Hilversum: Verloren, 2014.

Keynes, John Maynard. *The General Theory of Employment, Interest, and Money*. Edited by Elizabeth Johnson and Donald Moggridge. Vol. 7. The Collected Writings of John Maynard Keynes. London: Royal Economic Society, 1978. https://doi.org/10.1017/UPO9781139524278.

Kickert, Walter. "How the Dutch Government Responded to Financial, Economic and Fiscal Crisis." *Public Money & Management* 32, no. 6 (November 1, 2012): 439–43. https://doi.org/10.1080/09540962.2012.728784.

Kinzel, Katherina. "Method and Meaning: Ranke and Droysen on the Historian's Disciplinary Ethos." *History and Theory* 59, no. 1 (2020): 22–41. https://doi.org/10.1111/hith.12144.

Klamer, Arjo. *The New Classical Macroeconomics. Conversations with the New Classical Economists and Opponents*. Sussex: Wheatsheaf Books, 1984.

———. *Verzuilde Dromen: 40 jaar SER*. Amsterdam: Balans, 1990.

Klein, Judy L. "Implementation Rationality: The Nexus of Psychology and Economics at the

RAND Logistics Systems Laboratory, 1956–1966." *History of Political Economy* 48, no. annual suppl. (2016): 198–225. https://doi.org/10.1215/00182702-3619274.

Kleinberg, Ethan. "Introduction: The New Metaphysics of Time." *History and Theory* 51, no. Virtual Issue 1 (August 2012).

Kleinknecht, Alfred. "Het CPB waait met de tijdgeest mee." *Beleid en Maatschappij* 43, no. 2 (2016): 57–60. https://doi.org/10.5553/BenM/138900692016043002008.

Klerk, Rob de, Dick van der Laan, and Boe Thio. "Het CPB en de ontwikkeling van de werkgelegenheid." *Economische en Statistische Berichten* 60, no. 3002 (May 1975): 480–85.

Klimke, M., and J. Scharloth, eds. *1968 in Europe: A History of Protest and Activism, 1956–1977*. New York: Palgrave Macmillan, 2008.

Klundert, Theo van de. *Lonen en Werkgelegenheid*. Bedrijfskundige Signalementen. Leiden: H.E. Stenfert Kroese BV, 1977.

Knorr Cetina, Karin, Theodore R. Schatzki, and Eike Von Savigny, eds. *The Practice Turn in Contemporary Theory*. London: Routledge, 2005.

Koerner, Joseph Leo. "Hieronymus Bosch's World Picture." In *Picturing Science, Producing Art*, edited by Caroline A. Jones and Peter Galison, 297–323. London & New York: Routledge, 1998.

Kool, A. de. "Onze industrie kan niet zonder centraal vernieuwingsbeleid." *NRC Handelsblad*. September 23, 1972.

Koopmans, Lenze. *De Beslissingen over de Rijksbegroting*. Deventer: N.V. Uitgeversmaatschappij Æ. E. Kluwer, 1968.

Koselleck, Reinhart. "Begriffsgeschichte and Social History." In *Futures Past*, translated by Keith Tribe, 75–92. New York: Columbia University Press, 2004.

———. *Critique and Crisis: Enlightenment and the Pathogenesis of Modern Society*. Cambridge, MA: MIT Press, 1988.

———. *Futures Past: On the Semantics of Historical Time*. Translated by Keith Tribe. New York: Columbia University Press, 2004.

———. "Historia Magistra Vitae: The Dissolution of the Topos into the Perspective of a Modernized Historical Process." In *Futures Past*, translated by Keith Tribe, 26–42. New York: Columbia University Press, 2004.

———. "Historical Criteria of the Modern Concept of Revolution." In *Futures Past*, translated by Keith Tribe, 43–57. New York: Columbia University Press, 2004.

———. "Historical Prognosis in Lorenz von Stein's Essay on the Prussian Constitution." In *Futures Past: On the Semantics of Historical Time*, translated by Keith Tribe, 58–71. New York: Columbia University Press, 2004.

———. *Kritik und Krise: Eine Studie zur Pathogenese der bürgerlichen Welt*. Frankfurt am Main: Suhrkamp Verlag, 1973.

———. "Modernity and the Planes of Historicity." In *Futures Past: On the Semantics of Historical Time*, translated by Keith Tribe, 9–25. New York: Columbia University Press, 2004.

———. *Preußen zwischen Reform und Revolution: Allgemeines Landrecht, Verwaltung und soziale Bewegung von 1791 bis 1848*. Stuttgart: Klett-Cotta-Verlag, 1975.

———. "Representation, Event and Structure." In *Futures Past*, translated by Keith Tribe, 105–14. New York: Columbia University Press, 2004.

———. "Sluices of Memory and Sediments of Experience: The Influence of the Two World Wars on Social Consciousness." In *Sediments of Time: On Possible Histories*, edited by Sean Franzel and Stefan-Ludwig Hoffmann, 207–24. Stanford, CA: Stanford University Press, 2018.

———. "'Space of Experience' and 'Horizon of Expectation': Two Historical Categories." In *Futures Past: On the Semantics of Historical Time*, 255–75. New York: Columbia University Press, 2004.

———. "Staat und Gesellschaft in Preußen 1815-1848"." In *Staat und Gesellschaft im deutschen Vormärz 1815-1848*, edited by Werner Conze, 79–112. Stuttgart: Klett-Cotta-Verlag, 1962.

———. "The Eighteenth Century as the Beginning of Modernity." In *The Practice of Conceptual History: Timing History, Spacing Concepts*, translated by Todd Presner, 154–69. Stanford, CA: Stanford University Press, 2002.

———. "The Temporalization of Utopia." In *The Practice of Conceptual History: Timing History, Spacing Concepts*, translated by Todd Presner, 84–99. Stanford, CA: Stanford University Press, 2002.

———. "The Unknown Future and the Art of Prognosis." In *The Practice of Conceptual History: Timing History, Spacing Concepts*, translated by Todd Presner, 131–47. Stanford, CA: Stanford University Press, 2002.

Koyré, Alexandre. *From the Closed World to the Infinite Universe*. Baltimore London: Johns Hopkins University Press, 1957.

Krasner, Stephen D. "Approaches to the State: Alternative Conceptions and Historical Dynamics." *Comparative Politics* 16, no. 2 (1984): 223–46. https://doi.org/10.2307/421608.

Kuukkanen, Jouni-Matti. "Historicism and the Failure of HPS." *Studies in History and Philosophy of Science* 55 (February 2016): 3–11. https://doi.org/10.1016/j.shpsa.2015.08.002.

———. "History and Philosophy of History (HPH): A Call for Cooperation." In *Philosophy of History: Twenty-First-Century Perspectives*, edited by Herman Paul, 165–79. London: Bloomsbury, 2021. http://dx.doi.org/10.5040/9781350111875.0016.

Kuyper, Rudolf. "Het socialisme, de hoofdarbeiders en de komende cultuur." *De Socialistische Gids* 11, no. 3 (1926): 344–68.

Lacan, Jacques. "The Mirror Stage as Formative of the I Function as Revealed in Psychoanalytic Experience." In *Écrits: The First Complete Edition in English*, translated by Bruce Fink, 75–81. New York, NY: W. W. Norton & Company, 2006.

Lambooy, Jan. "Regionale En Ruimtelijke Politiek; over de Wenselijkheid van Een Heroriëntering van de Spreiding." *Economische En Statistische Berichten* 58, no. 2890 (July 3, 1973): 204–9.

Lansbergen, Peter. *Het Economiedebat: Economen contra Den Uyl en Van Agt*. Intermediair Bibliotheek. Amsterdam: intermediair, 1980.

Lapouge, Gilles. "'Les philosophes ne m'intéressent pas, je cherche des sages', une conversation avec Alexandre Kojève." *La Quinzaine littéraire*, January 15, 1968.

Laslett, Peter. "The Conversation Between the Generations." In *The Proper Study*, 172–89. Royal Institute of Philosophy Lectures. London: Palgrave Macmillan UK, 1971. https://doi.org/10.1007/978-1-349-81581-4_11.

Latour, Bruno. *An Inquiry into Modes of Existence: An Anthropology of the Moderns*. Translated by Catherine Porter. Cambridge, MA: Harvard University Press, 2013.

———. *Down to Earth: Politics in the New Climatic Regime*. Translated by Catherine Porter. Cambridge, UK: Polity, 2018.

———. *Facing Gaia: Eight Lectures on the New Climate Regime*. Translated by Catherine Porter. Cambridge, UK: Polity, 2017.

———. "Give Me a Laboratory and I Will Raise the World." In *Science Observed: Perspectives on the Social Study of Science*, edited by Karin Knorr Cetina and Michael Mulkay, 141–70. London: SAGE Publications, 1983.

———. "On Technical Mediation—Philosophy, Sociology, Genealogy." *Common Knowledge* 3, no. 2 (Fall 1994): 29–64.

———. "On the Partial Existence of Existing and Non Existing Objects." In *Biographies of Scientific Objects*, edited by Lorraine Daston. Chicago: University Of Chicago Press, 2000.

———. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press, 2005.

———. *Science in Action: How to Follow Scientists and Engineers Through Society*. Cambridge, MA: Harvard University Press, 1988.

———. *The Making of Law: An Ethnography of the Conseil d'Etat*. Cambridge, UK: Polity, 2009.

———. *The Pasteurization of France*. Translated by Alan Sheridan and John Law. Cambridge, MA: Harvard University Press, 1988.

———. *We Have Never Been Modern*. Translated by Catherine Porter. Cambridge, MA: Harvard University Press, 1993.

Latour, Bruno, and Michel Callon. "Unscrewing the Big Leviathan: How Macro-Structure Reality and How Sociologists Help Them to Do So." In *Advances in Social Theory and Methodology Eds. K. Cetina & A. Cicourel*. Hoboken: Routledge, 1981.

Latour, Bruno, and Christophe Leclercq. *Reset Modernity!* Cambridge, MA: MIT Press, 2016.

Latour, Bruno, and Peter Weibel, eds. *Making Things Public: Atmospheres of Democracy*. Cambridge, MA: MIT Press, 2005.

Le Bon, Gustav. *The Crowd: A Study of the Popular-Mind*. Compass Books C66. New York: Viking Press, 1960.

Lefort, Claude. "Outline of the Genesis of Ideology in Modern Societies." In *The Political Forms of Modern Society*, 181–236. Cambridge, MA: MIT Press, 1986.

———. "The Permanence of the Theologico-Political?" In *Democracy and Political Theory*, translated by David Macey, 213–55. Cambridge, UK: Polity, 1988.

———. "The Question of Democracy." In *Democracy and Political Theory*, translated by David Macey, 9–20. Cambridge, UK: Polity, 1988.

Leonard, Robert J. "'Seeing Is Believing' Otto Neurath, Graphic Art, and the Social Or-

der." *History of Political Economy* 31, no. (Supplement) (1999): 452–78. https://doi. org/10.1215/00182702-31-Supplement-452.

Lepenies, Wolf. *Between Literature and Science: The Rise of Sociology*. Cambridge, UK: Cambridge University Press, 1992.

Levinson, Sanford. "Responsibility for Crimes of War." *Philosophy and Public Affairs* 2, no. 3 (1973): 244–73.

Levy, David M., and Sandra J. Peart. *Escape from Democracy: The Role of Experts and the Public in Economic Policy*. Cambridge, UK: Cambridge University Press, 2016. https://doi. org/10.1017/9781316499078.

Liagre Böhl, Herman de, Jan Nekkers, and Laurens Slot, eds. *Nederland industrialiseert! Politieke en Ideologiese strijd rondom het naoorlogse industrialisatiebeleid 1945 - 1955*. Nijmegen: Socialstsiche uitgeverij Nijmegen, 1981.

Light, Jennifer. *From Warfare to Welfare: Defense Intellectuals and Urban Problems in Cold War America*. Baltimore: Johns Hopkins University Press, 2003.

———. "Taking Games Seriously." *Technology and Culture* 49, no. 2 (April 2008): 347–75. https://doi.org/10.1353/tech.0.0007.

Linders, Joost. "Den Uyl tussen technocraten en anti-groei romantici." *De Volkskrant*. November 30, 1974.

Lintsen, Harry. *Ingenieur van beroep: Hisotrie, praktijk, macht en opvattingen van ingenieurs in Nederland*. The Hague: Ingenieurspers, 1985.

Lintsen, Harry, and Rienk Vermij. "Ingenieurs en het Streven naar Technocratie." In *De opmars van deskundigen: Souffleurs van de samenleving*, edited by Frans Van Lunteren, Bert Theunissen, and Rienk Vermij. Amsterdam: Amsterdam University Press, 2002.

Lipset, Seymour Martin. "The Sources of The Radical Right." In *The New American Right*, edited by Daniel Bell, 259–312. New York: Criterion Books, 1955.

Löwith, Karl. *Meaning in History: The Theological Implications of the Philosophy of History*. Chicago: University of Chicago Press, 1949.

Lunteren, Frans van, and Marijn Hollestelle. "Paul Ehrenfest and the Dilemmas of Modernity." *Isis* 104, no. 3 (September 2013): 504–36. https://doi.org/10.1086/673271.

Luwel, André. *De technocratie: theorie en beweging*. Kampen: Kok Agora, 1980.

Lynch, Michael. "Ideas and Perspectives." In *The Handbook of Science and Technology Studies*, Third edition., 9–11. Cambridge, MA: MIT Press, 2007.

Lyotard, Jean-Francois. *The Postmodern Condition: A Report on Knowledge*. Translated by Geoff Bennington and Brian Massumi. Minneapolis: University of Minnesota Press, 1984.

Maas, Ad. "Johan Rudolph Thorbecke's Revenge: Objectivity and the Rise of the Dutch Nation State." edited by Jeroen Van Dongen and Herman Paul, 173–93. Boston Studies in the Philosophy and History of Science 321. Cham: Springer, 2017.

Maas, Harro. "Calculators and Quacks: Feeling the Economy's Pulse in Times of Crisis." *Research in the History of Economic Thought and Methodology* 36B (October 2018): 23–39. https://doi.org/10.1108/S0743-41542018000036B003.

———. *Economic Methodology: A Historical Introduction*. London: Routledge, 2014.

———. "Making Things Technical: Samuelson at MIT." *History of Political Economy* 46, no. Supplement 1 (January 1, 2014): 272–94. https://doi.org/10.1215/00182702-2716199.

———. "Rekenmeesters, Heelmeesters, Vogelaars: De vinger aan de pols van de Economie." *Krisis: Tijdschrift voor Actuele Filosofie* 3 (2010): 6–25.

Maas, Rob. "A Choice of Technological Futures." *Milieu* 1989, no. 4 (1989): 120–24.

Maas, Tim. "Tussen Wantrouwen en Waardering: het Centraal Planbureau en zijn invloed op de economische politiek in vier na-oorlogse Kabinetten, 1945 - 1952." Master thesis, Vrije Universiteit Amsterdam, 1986.

Machery, Edouard. *Philosophy Within Its Proper Bounds*. Oxford: Oxford University Press, 2017.

Macintyre, Alasdair. "The Relationship of Philosophy to Its Past." In *Philosophy in History: Essays in the Historiography of Philosophy*, edited by Jerome B. Schneewind, Quentin Skinner, and Richard Rorty, 31–48. Ideas in Context. Cambridge, UK: Cambridge University Press, 1984. https://doi.org/10.1017/CBO9780511625534.005.

MacKenzie, Donald, Fabian Muniesa, and Lucia Siu, eds. *Do Economists Make Markets?: On the Performativity of Economics*. Princeton, NJ: Princeton University Press, 2008.

Maier, Charles S. "Between Taylorism and Technocracy: European Ideologies and the Vision of Industrial Productivity in the 1920s." *Journal of Contemporary History* 5, no. 2 (1970): 27–61.

———. "The Politics of Inflation in the Twentieth Century." In *In Search of Stability: Explorations in Historical Political Economy*, 187–224. Cambridge, UK: Cambridge University Press, 1987.

Mair, Peter. *Ruling the Void: The Hollowing of Western Democracy*. New York: Verso, 2013.

Malafouris, Lambros. *How Things Shape the Mind: A Theory of Material Engagement*. Cambridge, MA: MIT Press, 2013.

Malkopoulou, Anthoula. "Hermann Heller on Politics: Discipline, Sphere and Activity." *History of European Ideas* 46, no. 4 (May 18, 2020): 393–404. https://doi.org/10.1080/0191 6599.2020.1738773.

Mamadouh, Virginie. *De stad in eigen hand: Provo's, kabouters en krakers als stedelijke sociale beweging*. Amsterdam: Uitgeverij SUA, 1992.

Mannheim, Karl. *Freedom, Power and Democratic Planning*. London: Routledge & Kegan Paul, 1951.

———. *Ideology and Utopia: An Introduction to the Sociology of Knowledge*. New York: Harcourt, Brace and Company, 1936.

Marchand, Suzanne. "Has the History of the Disciplines Had Its Day?" In *Has the History of the Disciplines Had Its Day?*, 131–52. Oxford: Oxford University Press, 2014. DOI:10.1093/acprof:oso/9780199769230.003.0007.

———. "How Much Knowledge Is Worth Knowing? An American Intellectual Historian's Thoughts on the Geschichte Des Wissens." *Berichte Zur Wissenschaftsgeschichte* 42, no. 2–3 (September 2019): 1–24. https://doi.org/10.1002/bewi.201900005.

———. "Weighing Context and Practices: Theodor Mommsen and the Many Dimensions of Nineteenth-Century Humanistic Knowledge." *History and Theory* 59, no. 4 (December 2020): 144–67. https://doi.org/10.1111/hith.12186.

Marcuse, Herbert. *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society*. Boston, MA: Beacon Press, 1964.

Marder, Michael. "Carl Schmitt and the De-Constitution of Europe, Part 1." *Telos Press* (blog), March 20, 2013. http://www.telospress.com/carl-schmitt-and-the-de-constitution-of-europe-part-1/.

Marres, Noortje. "The Issues Deserve More Credit: Pragmatist Contributions to the Study of Public Involvement in Controversy." *Social Studies of Science* 37, no. 5 (October 1, 2007): 759–80. https://doi.org/10.1177/0306312706077367.

Marx, Karl, and Friedrich Engels. "Manifesto of the Communist Party." In *Later Political Writings*, 1–30. Cambridge Texts in the History of Political Thought. Cambridge, UK: Cambridge University Press, 1996.

Massé, Pierre. *Le Plan Ou l'anti-Hasard*. Paris: Gallimard, 1965.

McCloskey, Deirdre N. *The Rhetoric of Economics*. Madison, WS: University of Wisconsin Press, 1998.

McCormick, John P. *Carl Schmitt's Critique of Liberalism: Against Politics as Technology*. Cambridge, UK: Cambridge University Press, 1997.

Mellink, Bram. "Politici zonder partij: Sociale zekerheid en de geboorte van het neoliberalisme in Nederland (1945-1958)." *BMGN - Low Countries Historical Review* 132, no. 4 (2017): 25–52. https://doi.org/10.18352/bmgn-lchr.10220.

———. "Towards the Centre: Early Neoliberals in the Netherlands and the Rise of the Welfare State, 1945–1958." *Contemporary European History* 29, no. 1 (February 12, 2019): 30–43. https://doi.org/10.1017/S0960777318000887.

———. "Tweedracht maakt macht. De PvdA, de doorbraak en de ontluikende polarisatiestrategie (1946-1966)." *BMGN - Low Countries Historical Review* 126, no. 2 (January 2011): 30–53. https://doi.org/10.18352/bmgn-lchr.7309.

Mertens, Ferdinand. *Otto Neurath en de maakbaarheid van de betere samenleving*. SCP-essay. Amsterdam: Uitgeverij Aksant, 2007.

Micheels, Sabine. *15 mei 1941: De oprichting van de Rijksdienst voor het Nationale Plan*. Delft: Delftse Uitgevers Maatschappij, 1978. https://repository.tudelft.nl/islandora/object/uuid%3Ae0e73884-d06f-48b2-9e28-3ad710427d1a.

Milani, Tommaso. "«Les Belles Années Du Plan»? Hendrik de Man and the Reinvention of Western European Socialism, 1914-36 Ca." PhD thesis, London School of Economics, 2017.

Mills, C. Wright. *The Power Elite*. Oxford: Oxford University Press, 1956.

Mirowski, Philip. *Machine Dreams: Economics Becomes a Cyborg Science*. Cambridge, UK: Cambridge University Press, 2002.

———. *Never Let a Serious Crisis Go to Waste: How Neoliberalism Survived the Financial Meltdown*. New York: Verso, 2013.

———. *Science-Mart: Privatizing American Science*. Cambridge, MA: Harvard University Press, 2011.

———. "Twelve Theses Concerning the History of Postwar Neoclassical Price Theory." *History of Political Economy* 38, no. annual suppl. (2006): 343–80. https://doi.org/DOI 10.1215/00182702-2005-029.

———. "When Games Grow Deadly Serious: The Military Influence on the Evolution of Game Theory." *History of Political Economy* 23, no. S1 (1991). https://doi.org/10.1215/00182702-23.S1.227.

Mirowski, Philip, and Edward Nik-Khah. "Markets Made Flesh: Performativity, and a Problem in Science Studies, Augmented with Consideration of the FCC Auctions." In *Do Economist Make Markets: On the Performativity of Economics*, edited by Donald MacKenzie, Muniesa, Fabian, and Lucia Siu, 190–224. Princeton, NJ: Princeton University Press, 2007.

———. *The Knowledge We Have Lost in Information: The History of Information in Modern Economics*. Oxford: Oxford University Press, 2017.

Mirowski, Philip, and Dieter Plehwe, eds. *The Road from Mont Pelerin: The Making of the Neoliberal Thought Collective*. Cambridge, MA: Harvard University Press, 2009.

Mirowski, Philip, and Esther-Mirjam Sent. "The Commercialization of Science, and the Response of STS." In *The Handbook of Science and Technology Studies*, edited by Edward Hackett, Olga Amsterdamska, Michael Lynch, and Judy Wajcman, 635–89. Cambridge, MA: MIT Press, 2007.

Mitchell, Timothy. *Carbon Democracy: Political Power in the Age of Oil*. London: Verso, 2013.

———. "Economentality: How the Future Entered Government." *Critical Inquiry* 40, no. 2 (2014): 479–507. https://doi.org/10.1086/676417.

———. "Fixing the Economy." *Cultural Studies* 12, no. 1 (January 1998): 82–101. https://doi.org/10.1080/095023898335627.

———. *Rule of Experts: Egypt, Techno-Politics, Modernity*. Berkeley: University of California Press, 2002.

———. "The Limits of the State: Beyond Statist Approaches and Their Critics." *American Political Science Review* 85, no. 1 (March 1991): 77–96. https://doi.org/10.1017/S0003055400271451.

———. "The Work of Economics: How a Discipline Makes Its World." *European Journal of Sociology* 46, no. 02 (August 2005): 297–320. https://doi.org/10.1017/S000397560500010X.

Molenaar, Leo. "*Wij kunnen het niet langer aan de politici overlaten...*" *De geschiedenis van het Verbond van Wetenschappelijke Onderzoekers (VWO), 1946-1980)*. Delft: Uitgeverij Elmar, 1994.

Molendijk, Arie L. "Willem Banning and the Reform of Socialism in the Netherlands." *Contemporary European History* 29, no. 2 (May 2020): 139–54. https://doi.org/10.1017/S096077732000003X.

Morgan, Mary S. "Economics." In *The Modern Social Sciences*, edited by Theodore M. Porter and Dorothy Ross, 7:275–305. The Cambridge History of Science. Cambridge, UK: Cambridge University Press, 2003.

———. "Experiments without Material Intervention: Model Experiments, Virtual Experiments and Virtually Experiments." In *The Philosophy of Scientific Experimentation*, edited by Hans Radder, 216–35. Pittsburgh: University of Pittsburgh Press, 2003.

———. "Seeking Parts, Looking for Wholes." In *Histories of Scientific Observation*, edited by Lorraine Daston and Elizabeth Lunbeck, 303–25. Chicago: The University of Chicago Press, 2011.

———. *The History of Econometric Ideas*. Cambridge, UK: Cambridge University Press, 1991.

———. *The World in the Model: How Economists Work and Think*. Cambridge, UK: Cambridge University Press, 2012.

Morgan, Mary S., and Margaret Morrison, eds. *Models as Mediators: Perspectives on Natural and Social Science*. Cambridge: Cambridge University Press, 1999.

Moscati, Ivan. *Measuring Utility: From the Marginal Revolution to Behavioral Economics*. Oxford: Oxford University Press, 2018.

Moses, A. Drik. *German Intellectuals and the Nazi Past*. Cambridge, UK: Cambridge University Press, 2007.

Mouffe, Chantal. *The Return of the Political*. London: Verso, 1993.

Moyn, Samuel. "Chapter 1. Before–and Beyond–the Liberalism of Fear." In *Between Utopia and Realism The Political Thought of Judith N. Shklar*, edited by Samantha Ashenden and Andreas Hess, 24–46. Philadelphia: University of Pennsylvania Press, 2019.

———. "Claude Lefort, Political Anthropology, and Symbolic Division." *Constellations* 19, no. 1 (2012): 37–50. https://doi.org/10.1111/j.1467-8675.2011.00666.x.

———. "Concepts of the Political in Twentieth-Century European Thought." In *The Oxford Handbook of Carl Schmitt*, edited by Jens Meierhenrich and Oliver Simons, 291–311. Oxford: Oxford University Press, 2016. https://doi.org/10.1093/oxfordhb/9780199916931.013.003.

———. "From Experience to Law: Leo Strauss and the Weimar Crisis of the Philosophy of Religion." *History of European Ideas* 33, no. 2 (June 1, 2007): 174–94. https://doi.org/10.1016/j.histeuroideas.2006.11.004.

———. "Hannah Arendt on the Secular." *New German Critique* 35, no. 3 (105) (2008). https://doi.org/10.1215/0094033X-2008-014.

———. *The Last Utopia: Human Rights in History*. Cambridge, MA: Harvard University Press, 2012.

Mudge, Stephanie L. *Leftism Reinvented: Western Parties from Socialism to Neoliberalism*. Cambridge, MA: Harvard University Press, 2018.

Müller, Jan-Werner. *A Dangerous Mind: Carl Schmitt in Post-War European Thought*. New Haven, CT: Yale University Press, 2003.

———. "Fear and Freedom: On 'Cold War Liberalism.'" *European Journal of Political Theory* 7, no. 1 (2008): 45–64. https://doi.org/10.1177/1474885107083403.

———. "Myth, Law and Order: Schmitt and Benjamin Read Reflections on Violence." *History of European Ideas* 29, no. 4 (2003): 459–73. https://doi.org/10.1016/j.histeuroideas.2003.08.002.

———. "On Conceptual History." In *Rethinking Modern European Intellectual History*, edited by Darren M. McMahon and Samuel Moyn, 74–93. Oxford: Oxford University Press, 2014.

Muniesa, Fabian, and Michel Callon. "Economic Experiments and the Construction of Markets." In *Do Economists Make Markets? On the Performativity of Economics*, edited by Donald MacKenzie, Fabian Muniesa, and Lucia Siu, 128–62. Princeton, NJ: Princeton University Press, 2007.

Muntjewerff, Henk. "Tussen Kapitaal en Arbeid, momenten uit het openbare leven van de dichter-ingenieur, Isaäc Pieter de Vooys," 174–218. Jaarboek De Oranjeboom 50, 1997.

Myers, David N. *Resisting History: Historicism and Its Discontents in German-Jewish Thought*. Princeton, NJ: Princeton University Press, 2010.

Nationale Raad voor Maatschappelijk Welzijn. *Sociale Planning, een instrument van welzijnsbeleid*. The Hague: NRMW, 1966.

Nelson, Alvin F. "Lester Ward's Conception of the Nature of Science." *Journal of the History of Ideas* 33, no. 4 (1972): 633–38. https://doi.org/10.2307/2708862.

Nemeth, Elisabeth. "The Philosophy of the 'Other Austrian Economics.'" In *New Challenges to Philosophy of Science*, edited by Hanne Andersen, Dennis Dieks, Wenceslao J. Gonzalez, Thomas Uebel, and Gregory Wheeler, 339–50. Dordrecht: Springer, 2013.

———. "Visualizing Relations in Society and Economics: Otto Neurath's Isotype-Method Against the Background of His Economic Thought." In *Neurath Reconsidered*, edited by Jordi Cat and Adam Tamas Tuboly. Boston Studies in the Philosophy and History of Science, no. 336. Cham: Springer, 2019.

Nemeth, Elisabeth, and Richard Heinrich. *Otto Neurath: Rationalität, Planung, Vielfalt*. Köln: Böhlau Verlag, 1999.

Nemeth, Elisabeth, Wolfram Pichler, and David Wagner, eds. *Image and Imaging in Philosophy*. Vol. 33. International Wittgenstein Symposium. Heusenstamm: Ontos Verlag, 2011.

Nemeth, Elisabeth, Stefan W. Schmitz, and Thomas E. Uebel, eds. *Otto Neurath's Economics in Context*. Vienna Circle Institute Yearbook. New York: Springer-Verlag, 2007. https://doi.org/10.1007/978-1-4020-6905-5.

Neurath, Otto. "Anti-Spengler." In *Empiricism and Sociology*, edited by Marie Neurath and Robert S. Cohen, 158–213. Dordrecht: D. Reidel Pusblising Company, n.d.

———. "Character and Course of Socialization." In *Empiricism and Sociology*, edited by Marie Neurath and Robert S. Cohen, 135–50. Dordrecht: D. Reidel Pusblising Company, 1973.

———. "Economic Plan and Calculation in Kind." In *Otto Neurath Economic Writings Selections 1904–1945*, edited by Robert S. Cohen and Thomas Uebel, 405–65. Vienna Circle Collection 23. Dordrecht: Springer, 2004.

———. *Economic Writings: Selections 1904—1945*. Edited by Th E. Uebel and Robert S. Cohen. Vienna Circle Collection 23. Dordrecht: Springer, 2004.

———. "Empirical Sociology: The Scientific Content of History and Political Economy." In *Empiricism and Sociology*, edited by Marie Neurath and Robert S. Cohen, 319–421. Dordrecht: D. Reidel Pusblising Company, 1973.

———. "Personal Life and Class Struggle." In *Empiricism and Sociology*, edited by Marie Neurath and Robert S. Cohen, 249–98. Dordrecht: D. Reidel Pusblising Company, 1973.

———. "Pseudorationalism of Falsification." In *Philosophical Papers 1913–1946*, translated by Robert S. Cohen and Marie Neurath, 121–31. Vienna Circle Collection. Dordrecht: D. Reidel Pusblising Company, 1983.

———. "The Current Growth in Global Productive Capacity." In *Otto Neurath: Economic Writings Selection, 1904–1945*, edited by Thomas Uebel and Robert S. Cohen, 475–505. Dordrecht: Kluwer, 2004.

———. "The Lost Wanderers of Descartes and the Auxiliary Motive (On the Psychology of the Decision)." In *Philosophical Papers, 1913–1946*, translated by Robert S. Cohen and Marie Neurath, 1–12. Vienna Circle Collection. Dordrecht: D. Reidel Pusblising Company, 1983.

———. "Visual Education: Humanisation versus Popularisation." In *Encyclopedia and Utopia: The Life and Work of Otto Neurath (1882—1945)*, edited by Juha Manninen, Elisabeth Nemeth, and Friedrich Stadler, 245–335. Vienna Circle Institute Yearbook, Vol. 4. Dordrecht: Kluwer, 1996.

Nicholson, Ian. "'Shocking' Masculinity: Stanley Milgram, 'Obedience to Authority,' and the 'Crisis of Manhood' in Cold War America." *Isis* 102, no. 2 (June 2011): 238–68. https://doi.org/10.1086/660129.

Notenboom, Harry. *De val van het kabinet-Cals: De financiële politiek van de Katholieke Volkspartij in de parlementaire periode 1963-1967*. The Hague: Sdu Uitgeverij, 1991.

Nuyen, A. T. "Critique of Ideology: Hermeneutics or Critical Theory?" *Human Studies* 17, no. 4 (1994): 419–32.

NVV, Nederlands Verbond van Vakverenigingen, and Sociaal-Democratische Arbeiderspartij SDAP. *Bedrijfsorganisatie en Medezeggenschap*. Amsterdam: N.V. Boekhandel en Uitgevers-Mij "Ontwikkeling," 1923.

Ohana, David. "Carl Schmitt's Legal Fascism." *Politics, Religion & Ideology* 20, no. 3 (July 3, 2019): 273–300. https://doi.org/10.1080/21567689.2019.1656073.

Olsen, Niklas. *History in the Plural: An Introduction to the Work of Reinhart Koselleck*. New York: Berghahn Books, 2012.

Oosten, Frits van. "Linkse en rechtse economen als politieke profeten." *Socialisme en Democratie* 34, no. 4 (1977): 161–70.

Oskamp, Anton. "Interview met de tekenaar." In *De lekkerste tekeningen van Jan Willem van Vugt*, by Jan Willem Van Vugt. Amsterdam: Jeugdwerk Nu, 1975.

Östling, Johan. *Humboldt and the Modern German University: An Intellectual History*. Lund: Lund University Press, 2018.

Oudenampsen, Merijn. "A Dialectic of Freedom: The Dutch Post-War Clash Between Socialism and Neoliberalism." *Socialism and Democracy* 30, no. 1 (March 2016): 128–48. https://doi.org/10.1080/08854300.2015.1132648.

———. "Between Conflict and Consensus: The Dutch Depoliticized Paradigm Shift of the 1980s." *Comparative European Politics* 18, no. Comparative European Politics (2020): 1–22. https://doi.org/10.1057/s41295-020-00208-3.

———. "The Conservative Embrace of Progressive Values: On the Intellectual Origins of the Swing to the Right in Dutch Politics." PhD thesis, Tilburg University, 2018.

———. "The Responsible Society: On Christian Democracy and Neoliberalism." Paper presented at the Building the neoliberal welfare state Workshop, University of Amsterdam, 28 June 2019.

Oudenampsen, Merijn, and Bram Mellink. *De markt als meester: Een geschiedenis van het neoliberalisme in Nederland.* Amsterdam: Boom, Forthcoming.

———. "Bureaucrats First: The Leading Role of Policymakers in the Dutch Economic Paradigm-Shift of the 1980s." *TSEG, Low Countries Journal of Social and Economic History* 18, no. 1 (2021).

———. "De zichtbare hand: een historisch-sociologische benadering van neoliberalisme in Nederland." *Sociologie* 15, no. 3 (2019): 241–51. https://doi.org/10.5117/soc2019.3.001. oude.

———. "The Roots of Dutch Frugality: The Role of Public Choice Theory in Dutch Budgetary Policy." *Journal of European Public Policy* First view (2021). https://doi.org/10.1080/13501763.2021.1936130.

Passenier, J. *Van planning naar scanning: Een halve eeuw Planbureau in Nederland.* Groningen: Wolters-Noordhoff, 1994.

Paul, Herman. "A Missing Link in the History of Historiography: Scholarly Personae in the World of Alfred Dove." *History of European Ideas* 45, no. 7 (June 2019): 1011–28. https://doi.org/10.1080/01916599.2019.1628084.

———. "The Scientific Self: Reclaiming Its Place in the History of Research Ethics." *Science and Engineering Ethics* 24, no. 5 (October 1, 2018): 1379–92. https://doi.org/10.1007/s11948-017-9945-8.

———. "The Specter of Historicism: A Discourse of Fear Herman Paul." In *Historicism: A Travelling Concept*, edited by Herman Paul and Adriaan van Veldhuizen. London: Bloomsbury Academic, 2020.

———. "What Is a Scholarly Persona? Ten Theses on Virtues, Skills, and Desires." *History and Theory* 53, no. 3 (2014): 348–71. https://doi.org/10.1111/hith.10717.

Pen, Jan. "Forrester-Meadows: Een Dreun Op Het Hoofd." In *Dat Stomme Economenvolk Met Zijn Heilige Koeien*. Utrecht: Het Spectrum, 1976.

———. "Harder Computer Waarheden." *Het Parool*, June 29, 1977.

———. "Met Jan Tinbergen - I." *Hollands Maandblad* 43, no. 1 (2005): 686–97.

Peper, Bram. *Vorming van Welzijnsbeleid. Evolutie En Evaluatie van Het Opbouwwerk*. Amsterdam: Boom, 1972.

Plato. *The Republic*. Edited by Giovanni Ferrari. Translated by Thomas Griffith. Cambridge, UK: Cambridge University Press, 2012.

Pocock, J. G. A. *The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition*. Princeton, NJ: Princeton University Press, 1975.

Polak, Fred. *De Toekomst is Verleden Tijd*. Vol. Vol. 2. Utrecht: Uitgeversmaatschappij W. de Haan N.V., 1955.

Polanyi, Michael. "On Liberalism and Liberty." *Encounter*, no. 4 (March 1955): 29–34.

Pompe, Willem. *Het nieuwe tijdperk en het recht*. Amsterdam: Vrij Nederland, 1945.

———. "Macht en recht." *Annalen van het Thijmgenootschap* 39 (1950): 101–6.

———. "Verruiming van de toepasselijkheid van wettelijke strafbepalingen." *Tijdschrift voor Strafrecht*, 1943.

Popper, Karl. *The Open Society and Its Enemies*. London: Routledge, 1945.

Porter, Theodore M. "Revenge of the Humdrum: Bureaucracy as Profession and as a Site of Science." *Journal for the History of Knowledge* 1, no. 1 (2020): 1–5. https://doi.org/10.5334/jhk.20.

———. *Trust in Numbers*. Princeton, NJ: Princeton University Press, 1996.

Potter, Julian Joseph. "Meaning in Eternity: Karl Löwith's Critique of Hope and Hubris." *Thesis Eleven* 110, no. 1 (June 1, 2012): 27–45. https://doi.org/10.1177/0725513612450146.

Praag, Philip van. *Strategie en illusie: Elf jaar intern debat in de PvdA, 1966-1977*. Amsterdam: Het Spinhuis, 1990.

Rawls, John. "Justice as Fairness." *The Philosophical Review* 67, no. 2 (1958): 164–94. https://doi.org/10.2307/2182612.

Rees, Amanda, and Rhys Morus, eds. *Presenting Futures Past: Science Fiction and the History of Science*. Osiris 34. Chicago: University of Chicago Press, 2019.

Reijnders, Lucas. "Dan maar Albanië." *Socialisme en Democratie* 37, no. 2 (February 1980): 78–80.

Reisch, George. "Aristotle in the Cold War: On the Origins of Thomas Kuhn's The Structure of Scientific Revolutions." In *Kuhn's 'Structure of Scientific Revolutions' at Fifty*, edited by Robert Richards and Lorraine Daston, 12–29. Chicago: University of Chicago Press, 2016.

———. "The Paranoid Style in American History of Science." *Theoria : An International Journal for Theory, History and Fundations of Science* 27, no. 3 (2012): 323–42. https://doi.org/10.1387/theoria.6273.

Rempel, F. Warren. *The Role of Value in Karl Mannheims Sociology of Knowledge. The Role of Value in Karl Mannheims Sociology of Knowledge*. The Hague: Mouton, 1965.

Rheinberger, Hans-Jörg. "Preparations, Models, and Simulations." *History and Philosophy of the Life Sciences* 36, no. 3 (2015): 321–34. https://doi.org/10.1007/s40656-014-0049-3.

Ricœur, Paul. "Hermeneutics and the Critique of Ideology." In *Hermeneutics and the Human Sciences: Essays on Language, Action and Interpretation*, edited by John B. Thompson, 23–60. Cambridge Philosophy Classics. Cambridge, UK: Cambridge University Press, 2016. https://doi.org/10.1017/CBO9781316534984.005.

———. *Time and Narrative. Volume 3.* Translated by Kathleen Blamey and David Pellauer. Chicago: University of Chicago Press, 1988.

Riebeling, Zachary. "Trauma Delegitimized: Karl Löwith and the Cosmic View of History." *History and Theory* 60, no. 1 (2021): 23–49. https://doi.org/10.1111/hith.12191.

Rijk, Mirjam de. "Hegemonie CPB moet doorbroken." *De Volkskrant*, February 1, 2016.

Ringer, Fritz K. *The Decline of the German Mandarins: The German Academic Community 1890–1933*. Cambridge, MA: Harvard University Press, 1969.

RIVM, Rijksinstituut voor Volksgezondheid en Milieu. *Zorgen voor morgen: Nationale milieuverkenning 1985-2010*. Alphen aan den Rijn: Samsam H.D. Tjeenk Willink, 1988.

Rodenburg, Peter. "Rationalization and the 'Engineer-Economists' in the Netherlands, 1920—1940." *Research in the History of Economic Thought and Methodology* 36B (2018): 41–57.

Rodgers, Daniel T. *Age of Fracture*. Cambridge, MA: Harvard University Press, 2011.

Rohde, Joy. *Armed with Expertise: The Militarization of American Social Research during the Cold War*. Ithaca: Cornell University Press, 2013.

Romizi, Donata. "The Vienna Circle's 'Scientific World-Conception': Philosophy of Science in the Political Arena." *HOPOS* 2, no. 2 (Fall 2012): 205–42. https://doi.org/10.1086/666659.

Rosanvallon, Pierre. *Counter-Democracy: Politics in an Age of Distrust*. Translated by Arhtur Goldhammer. Cambridge, UK: Cambridge University Press, 2010.

———. "François Guizot and the Sovereignty of Reason." In *Democracy: Past and Future*, edited by Samuel Moyn, 117–26. New York: Columbia University Press, 2006.

———. "From the Past to the Future of Democracy." In *Democracy: Past and Future*, edited by Samuel Moyn, 189–217. New York: Columbia University Press, 2006.

———. "Inaugural Lecture, Collège de France." In *Democracy: Past and Future*, edited by Samuel Moyn, 31–59. New York: Columbia University Press, 2006.

———. *La Crise de l'État-Providence*. Paris: Editions du Seuil, 1981.

———. "Postscript: Democracy in an Era of Distrust." In *Democracy: Past and Future*, edited by Samuel Moyn, 235–52. New York: Columbia University Press, 2006.

———. "Revolutionary Democracy." In *Democracy: Past and Future*, edited by Samuel Moyn, 79–88. New York: Columbia University Press, 2006.

———. "The Market, Liberalism, and Anti-Liberalism." In *Democracy: Past and Future*, edited by Samuel Moyn, 147–59. New York: Columbia University Press, 2006.

———. *The New Social Question: Rethinking the Welfare State*. Translated by Barbara Harshav. Princeton, NJ: Princeton University Press, 2000.

———. "The Republic of Universal Suffrage." In *Democracy: Past and Future*, edited by Samuel Moyn, 98–116. New York: Columbia University Press, 2006.

———. "Voorbij de verzorgingsstaat." *De Volkskrant*. April 12, 1986.

Ross, Dorothy. *The Origins of American Social Science*. Cambridge, UK: Cambridge University Press, 1990.

———. "Whatever Happened to the Social in American Social Thought? An Answer in Two Parts." *Modern Intellectual History* First view (2021). https://doi.org/10.1017/S1479244320000529.

———. "Whatever Happened to the Social in American Social Thought? Part Two." *Modern Intellectual History* First view (2021). https://doi.org/10.1017/S1479244320000530.

Rowland, Nicholas J, and Jan-Hendrik Passoth. "Infrastructure and the State in Science and Technology Studies." *Social Studies of Science* 45, no. 1 (February 1, 2015): 137–45.

https://doi.org/10.1177/0306312714537566.

Rullens, Annemarie. "From Science to Science: Anton Pannekoek, Willem Bonger, and Scientific Socialism." In *Anton Pannekoek: Ways of Viewing Science and Society*, edited by Chaokang Tai, Bart Van der Steen, and Jeroen Van Dongen, 157–72. Amsterdam: Amsterdam University Press, 2019.

Rulof, Bernard. "Hoe het Plan van de Arbeid te Verkopen? Reclame en 'massapsychologische actie' van de SDAP." *TSEG - The Low Countries Journal of Social and Economic History* 2, no. 1 (2005): 84–104. https://doi.org/10.18352/tseg.715.

Runciman, David. *Pluralism and the Personality of the State*. Cambridge, UK: Cambridge University Press, 1997.

Runia, Eelco. "Presence." *History and Theory* 45, no. 1 (2006): 1–29. https://doi.org/10.1111/j.1468-2303.2006.00346.x.

Rüsen, Jörn. *Evidence and Meaning: A Theory of Historical Studies*. New York: Berghahn Books, 2019.

Rustin, Michael. "The Future of Post-Socialism." *Radical Philosophy* 74 (December 1995): 17–26.

Rutten, Frans. "De betekenis van macro-econornetrische modellen bij de beleidsvoorbereiding." In *Toegepaste Economie: Grenzen en Mogelijkheden. Opstellen aangeboden aan C.A. van den Beld bij zijn afscheid als directeur van het Centraal Planbureau*, edited by Hans Den Hartog and Johannes Weitenberg, 78–101. The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1984.

———. "Macro-economische opmerkingen over de werkgelegen." *Economische en Statistische Berichten* 60, no. 2983 (January 1, 1975): 4–5.

———. "Over het macro-economische beleid voor de middellange termijn." *De Economist* 116, no. 3 (1968): 287–308.

Salverda, Wiemer. "De planbureau-paradox: minder gezag en meer invloed." *Tijdschrift voor politieke ekonomie* 15, no. 3 (1993): 106–11.

Sandner, Günther. "Demokratisierung des Wissens: Otto Neuraths politisches Projekt." *Österreichische Zeitschrift für Politikwissenschaft* 38, no. 2 (2009): 231–48. https://doi.org/10.15203/ozp.673.vol38iss2.

———. "Economy, Ideology and Culture: Otto Neurath's Approach to a Precarious Relationship." In *Otto Neurath's Economics in Context*, edited by Elisabeth Nemeth, Stefan W. Schmitz, and Thomas Uebel, 141–55. Vienna Circle Institute Yearbook 13. Dordrecht: Springer, 2007.

Schabas, Margaret. "Breaking Away: History of Economics as History of Science." *History of Political Economy* 24, no. 1 (March 1, 1992): 187–203. https://doi.org/10.1215/00182702-24-1-187.

Schelsky, Helmut. "Der Mensch in der wissenschaftlichen Zivilisation." In *Auf der Such nach Wirklichkeit*, 439–81. Düsseldorf: Eugen Diederichs Verlag, 1961.

Schinkel, Willem. "De virtualisering van burgerschap en de paternalistische staat." *Sociologie* 5, no. 1 (January 2009): 48–68.

———. "Waarom het BIJ1-verkiezingsprogramma niet door het CPB doorgerekend wordt: de argumenten op een rijtje." BIJ1, 2020. https://cloud.bij1.org/s/rDEoBmtSCDMxGkT.

Schliesser, Eric. "Jon Elster, Sour Grapes." In *The Oxford Handbook of Classics in Contemporary Political Theory*, edited by Jacob T. Levy. Oxford: Oxford University Press, 2018.

Schmelzer, Matthias. "'Born in the Corridors of the OECD': The Forgotten Origins of the Club of Rome, Transnational Networks, and the 1970s in Global History." *Journal of Global History* 12, no. 1 (March 2017): 26–48. https://doi.org/10.1017/S1740022816000322.

———. "The Crisis before the Crisis: The 'Problems of Modern Society' and the OECD, 1968–74." *European Review of History: Revue Européenne d'histoire* 19, no. 6 (2012): 999–1020. https://doi.org/10.1080/13507486.2012.739148.

———. *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm*. Cambridge, UK: Cambridge University Press, 2016.

Schmitt, Carl. *Constitutional Theory*. Durham, NC: Duke University Press, 2008.

———. *Political Theology: Four Chapters on the Concept of Sovereignty*. Translated by George Schwab. Cambridge, MA: MIT Press, 1985.

———. "The Age of Neutralization and Depolitization." In *The Concept of the Political*, translated by George Schwab, 80–96. Chicago: The University of Chicago Press, 2007.

———. *The Concept of the Political*. Translated by George Schwab. Chicago: The University of Chicago Press, 2007.

Schoonenboom, Jan. "Duurzame Risico's." *Tijdschrift voor politieke ekonomie* 18, no. 4 (1995): 70–77.

Schumpeter, Joseph. *Capitalism, Socialism and Democracy*. New York: Harper & Brothers, 1942.

Schuyt, Kees. "Crisis bedreigt verzorgingsmaatschappij." *De Volkskrant*. May 7, 1981.

———. "Particulier initiatief moet weer zelf betalen." *De Volkskrant*. May 8, 1981.

Schuyt, Kees, and Ed Taverne. *1950: Prosperity and Welfare*. Dutch Culture in a European Perspective 4. New York: Palgrave Macmillan, 2004.

Scott, James C. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press, 1998.

Scott-Smith, Gils. "The Congress for Cultural Freedom, the End of Ideology and the 1955 Milan Conference: 'Defining the Parameters of Discourse.'" *Journal of Contemporary History* 37, no. 3 (July 2002): 437–55. https://doi.org/10.1177/00220094020370030601.

SDAP, Sociaal-Democratische Arbeiderspartij. *Het Socialisatievraagstuk*. Amsterdam: N.V. Boekhandel en Uitgevers-Mij "Ontwikkeling," 1920.

———. *NIeuwe Organen*. Amsterdam: N.V. De Arbeiderspers, 1931.

Secord, James A. "Knowledge in Transit." *Isis* 95, no. 4 (December 2004): 654–72. https://doi.org/10.1086/430657.

Seefried, Elke. "Rethinking Progress. On the Origin of the Modern Sustainability Discourse, 1970–2000." *Journal of Modern European History* 13, no. 3 (2015): 377–400. https://doi.org/10.17104/1611-8944-2015-3-377.

Seumeren, Harry van. "Verschil van inzicht over de oorzaak werkloosheid: Vraagtekens bij voorstellingen." *De Volkskrant*. June 18, 1977.

Shapin, Steven, and Simon Schaffer. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life*. Princeton, NJ: Princeton University Press, 1985.

Shklar, Judith. *After Utopia: The Decline of Political Faith*. Princeton, NJ: Princeton University Press, 1957.

———. "The Political Theory of Utopia: From Melancholy to Nostalgia." *Daedalus* 94, no. 2 (1965): 367–81.

Shklar, Judith N. "The Liberalism of Fear." In *Political Thought and Political Thinkers*, 3–20. Chicago: University of Chicago Press, 1998.

Siclovan, Diana. "Lorenz Stein and German Socialism 1835—1872." PhD thesis, University of Cambridge, 2014.

Simon, Zoltán Boldizsár. *History in Times of Unprecedented Change: A Theory for the 21st Century*. London: Bloomsbury Academic, 2019.

———. "(The Impossibility of) Acting upon a Story That We Can Believe." *Rethinking History* 22, no. 1 (January 2018): 105–25. https://doi.org/10.1080/13642529.2017.1419445.

———. "We Have Never Been Presentist: On Regimes of Historicity." *JHI Blog* (blog), May 2, 2016. https://jhiblog.org/2016/05/02/we-have-never-been-presentist-on-regimes-of-historicity/.

Skinner, Quentin. *Hobbes and the State*. Spinoza Lectures. Assen: Royal Van Gorcum, 2016.

———. "Meaning and Understanding in the History of Ideas." *History and Theory* 8, no. 1 (1969): 3–53. https://doi.org/10.2307/2504188.

———. "The Sovereign State: A Genealogy." In *Sovereignty in Fragments: The Past, Present and Future of a Contested Concept*, edited by Hent Kalmo and Quentin Skinner, 26–46. Cambridge, UK: Cambridge University Press, 2010. https://doi.org/10.1017/CBO9780511675928.002.

Slobodian, Quinn. "Demos Veto and Demos Exit: The Neoliberals Who Embraced Referenda and Secession." *Journal of Australian Political Economy* 86 (2020): 19–36.

———. *Globalists: The End of Empire and the Birth of Neoliberalism*. Cambridge, MA: Harvard University Press, 2018.

Smeltzer, Joshua. "Carl Schmitt's Historicity between Theology and Technology." PhD thesis, University of Cambridge, 2020. https://doi.org/10.17863/CAM.52240.

Smit, Jorrit. "Utility Spots: Science Policy, Knowledge Transfer and the Politics of Proximity." PhD thesis, Leiden University, 2021.

Solovey, Mark. "Project Camelot and the 1960s Epistemological Revolution: Rethinking the Politics-Patronage-Social Science Nexus." *Social Studies of Science* 31, no. 2 (April 1, 2001): 171–206. https://doi.org/10.1177/0306312701031002003.

Solovey, Mark, and Hamilton Cravens, eds. *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature*. New York: Palgrave Macmillan, 2012.

Solow, Robert M. "A Contribution to the Theory of Economic Growth." *The Quarterly Journal of Economics* 70, no. 1 (February 1956): 65. https://doi.org/10.2307/1884513.

———. "Investment and Technical Progress." In *Mathematical Methods in the Social Sciences*. Stanford, CA: Srandord University Press, 1960.

———. "Substitution and Fixed Proportions in the Theory of Capital." *The Review of Economic Studies* 29, no. 3 (June 1962): 207. https://doi.org/10.2307/2295955.

———. "Technical Change and the Aggregate Production Function." *Review of Economics and Statistics* 39 (1957): 312–20.

Somsen, Geert. "Scientists of the World Unite: Socialist Internationalism and the Unity of Science." In *Pursuing the Unity of Science: Ideology and Scientific Practice from the Great War to the Cold War*, edited by Harmke Kamminga and Geert Somsen, 83–104. London: Routledge, 2016.

———. "Value-Laden Science: Jan Burgers and Scientific Politics in the Netherlands." *Minerva* 46, no. 2 (June 2008): 231–45.

———. "Waardevolle wetenschap. Bespiegelingen over natuurwetenschap, Moraal en samenleving In de aanloop naar de doorbraakbeweging." *Gewina: Tijdschrift voor de Geschiedenis der Geneeskunde, Natuurwetenschappen, Wiskunde en Techniek* 24 (2001): 207–24.

Son, Kyong-Min. "Cybernetic Freedom: David Easton, Systems Thinking, and the Search for Dynamic Stability." *American Political Thought* 7, no. 4 (Fall 2018): 614–45. https://doi.org/10.1086/699907.

Sonenscher, Michael. "Krausism and Its Legacy." *Global Intellectual History* 5, no. 1 (2019): 20–40. https://doi.org/10.1080/23801883.2019.1586787.

Specter, Matthew G. *Habermas: An Intellectual Biography*. Cambridge, UK: Cambridge University Press, 2010.

———. "What's 'Left' in Schmitt?: From Aversion to Appropriation in Contemporary Political Theory." In *The Oxford Handbook of Carl Schmitt*, edited by Jens Meierhenrich and Oliver Simons, 426–55. Oxford: Oxford University Press, 2017.

Steenbergen, Bart van. "De toekomst in een maatschappij-kritisch perspectief." *Katernen 2000* 2, no. 9–10 (1969): 9–17.

———. "De Wolff en de Wetenschappen." *Katernen 2000* 4, no. 2 (1971).

———. "Het kritisch toekomst denken van Arthur Waskow." *Katernen 2000* 2, no. 5 (1969): 3–23.

———. *Orde of Conflict: tegengestelde maatschappijvisies binnen de futurologie*. Euros-Boekjes, no. 2. Amersfoort: Werkgroep 2000, 1969.

Steenbergen, Bart van, and Eduard van Hengel. *Technocratie: Ideologie of werkelijkheid*. Euros-Boekjes, no. 3. Amersfoort: Werkgroep 2000, 1971.

Stellinga, Bart. *Dertig jaar privatisering, verzelfstandiging en marktwerking*. WRR Webpublicaties 65. Amsterdam: Amsterdam University Press, 2012.

Stevers, Theo. "Daling werkloosheid vrome wens." *De Volkskrant*. September 22, 1976.

———. "De stijging van de collectieve lasten in relatie tot de werkgelegenheid, extern evenwicht en budgetruimte." Amsterdam: Paper for the Vergadering van de Nederlandse Vereniging voor Openbare Financiën in Amsterdam, May 24, 1975.

———. "Discussie Naar Aanleiding van Friedman En Den Uyl; Vijf Vragen Aan Acht

Economen. Repliek van Prof. Dr. Th. Stevers." In *Bedreigde Democratie? Parlementaire Democratie En Overheidsbemoeienis in de Economie*, edited by Hans Daudt and E. Van der Wolk, 88–96. Amsterdam: intermediair, 1978.

———. "Een economische van het demokratische proces." *Maandschrift Economie*, 1968, 37–70.

———. "Is het overheidsbeleid endogeen?" *Economische Statistische Berichten* 61, no. 3067 (1976): 1037–40.

———. *Openbare Financiën en Ekonomie*. Leiden: H.E. Stenfert Kroese, 1971.

———. "Vijfde rapport studiegroep 'Begrotingsruimte.'" *Economische Statistische Berichten* 59, no. 2958 (July 1974): 571–74.

Stewart, Iain. *Raymond Aron and Liberal Thought in the Twentieth Century*. Cambridge, UK: Cambridge University Press, 2019.

Stichweh, Rudolf. "The Sociology of Scientific Disciplines: On the Genesis and Stability of the Disciplinary Structure of Modern Science." *Science in Context* 5, no. 1 (ed 1992): 3–15. https://doi.org/10.1017/S0269889700001071.

Stiphout, Henk van. "Vernieuwingen in het arbeidsbestel in een tijd van economische stagnatie." *Economische en Statistische Berichten* 67, no. 3350 (April 7, 1982): 376–82.

———. "Werkers en niet-werkers in de samenleving." *Beeld & Maatschappij* 3, no. 12 (1976): 306–18.

Stolleis, Michael, and Thomas Dunlap. *Public Law in Germany: A Historical Introduction from the 16th to the 21st Century*. Oxford: Oxford University Press, 2017.

Stolwijk, Herman. "Economie en milieu: op zoek naar duurzaamheid." *Tijdschrift voor politieke ekonomie* 19, no. 3 (1997): 29–48.

Stråth, Bo. "Ideology and Conceptual History." In *The Oxford Handbook of Political Ideologies*, edited by Michael Freeden and Marc Stears, 4–19, 2013. https://doi.org/10.1093/oxfordhb/9780199585977.013.0013.

Strauss, Leo. *Natural Right and History*. Chicago: University of Chicago Press, 1953.

Streeck, Wolfgang. *Buying Time: The Delayed Crisis of Democratic Capitalism*. Translated by Patrick Camiller and David Fernbach. New York: Verso, 2014.

Studiegroep Begrotingsruimte. Kwantitatieve uitgangspunten voor het trendmatige begrotingsbeleid in de komende jaren, Kamerstukken II, 1971–1972, 11 780, no. 2 (1972).

Suzuki, Tomo. "The Epistemology of Macroeconomic Reality: The Keynesian Revolution from an Accounting Point of View." *Accounting, Organizations and Society* 28 (2003): 471–517. https://doi.org/doi:10.1016/S0361-3682(01)00061-7.

Talmon, Jacob. *The Origins of Totalitarian Democracy*. London: Secker & Warburg, 1952.

Tamm, Marek, and Laurent Olivier. "Introduction: Rethinking Historical Time." In *Rethinking Historical Time: New Approaches to Presentism*, edited by Marek Tamm and Laurent Olivier. London: Bloomsbury Academic, 2019.

———, eds. *Rethinking Historical Time: New Approaches to Presentism*. London: Bloomsbury Academic, 2019.

Tatenhove, Jan van. "Milieubeleid onder Dak? Beleidsvoeringsprocessen in het Nederlandse

milieubeleid in de periode 1970-1990; nader uitgewerkt voor de Gelderse Vallei." PhD thesis, Wageningen University and Research, 1993.

Taubes, Jacob. *Occidental Eschatology*. Translated by David Ratmoko. Stanford, CA: Stanford University Press, 2009.

Taylor, Charles. *Modern Social Imaginaries*. Durham, NC: Duke University Press Books, 2003.

Taylor-Gooby, Peter. "The Future of the British Welfare State: Public Attitudes, Citizenship and Social Policy under the Conservative Governments of the 1980s." *European Sociological Review* 4, no. 1 (May 1988): 1–19.

Teixeira, Pedro. "Early Interest, Lasting Scepticism: The Views about Education at the OECD." *Oeconomia* 9, no. 3 (September 2019): 559–81. https://doi.org/10.4000/oeconomia.6641.

Theil, Henri. "Econometric Models and Welfare Maximisation." *Weltwirtschaftliches Archiv* 72 (1954): 60–83.

———. *Economic Forecasts and Policy*. Contributions to Economic Analysis, XV. Amsterdam: North-Holland Publishing Company, 1958.

Therborn, Göran, Geoff Eley, Hartmutt Kaelble, Philippe Chassaigne, and Andreas Wirsching. "The 1970s and 1980s as a Turning Point in European History?" *Journal of Modern European History* 9, no. 1 (April 2011): 8–26. https://doi.org/10.17104/1611-8944_2011_1_8.

Thoenes, Piet. "Taak en structuur van het georganiseerd sociaal onderzoek." *Sociologische Gids* 3, no. 5 (1956): 81–86.

———. "Verzorgingsstaat kan best behouden blijven." *De Volkskrant*. May 15, 1981.

Thomas, William, and Lambert Williams. "The Epistemologies of Non-Forecasting Simulations, Part I: Industrial Dynamics and Management Pedagogy at MIT." *Science in Context* 22, no. 2 (2009): 245–70. https://doi.org/DOI:10.1017/S0269889709002233.

Thompson, Noel. "Hollowing Out the State: Public Choice Theory and the Critique of Keynesian Social Democracy." *Contemporary British History* 22, no. 3 (2008): 355–82. https://doi.org/10.1080/13619460701731913.

Thornhill, Chris J. "Carl Schmitt after the Deluge: A Review of the Recent Literature." *History of European Ideas* 26, no. 2–3 (2000): 225–40. https://doi.org/10.1016/S0191-6599(01)00012-2.

Thorpe, Charles. "Political Theory in Science and Technology Studies." In *The Handbook of Science and Technology Studies*, 3rd ed., 63–82. Cambridge, MA: MIT Press, 2007.

Tienen, Louis van, ed. *Anatomie van het Welzijn*. Deventer: Van Loghum Slaterus, 1970.

Tinbergen, Jan. "A Comparative Study of Two Decision Models: Frisch's Model and a Simple Dutch Planning Model." *Econometrica* 19, no. 2 (April 1951): 190–219.

———. *Centralization and Decentralization in Economic Policy*. Contributions to Economic Analysis 6. Amstedam: North-Holland Publishing Company, 1954.

———. "De derde Weg." *Socialisme en Democratie* 3, no. 12 (1946): 369–72.

———. "De internationale taak van de sociaal-democratie." *Socialisme en Democratie* 14, no. 2 (February 1957): 84–89.

———. "De Optimale Organisatie van Economische Beslissingen." In *Mededelingen Der Koninklijke Nederlandse Akademie Van Wetenschappen, Afd. Letterkunde*, Vol. 7. 24. Amster-

dam: North-Holland Publishing Company, 1961.

———. "De Werkloosheid." *De Socialistische Gids* 15, no. 12 (December 1930): 817–23.

———. "Do Communist and Free Economies Show a Converging Pattern?" *Soviet Studies* 12, no. 4 (April 1961): 333–41.

———. *Economic Policy: Principles and Design*. Contributions to Economic Analysis 10. Amsterdam: North-Holland, 1956.

———. "Europe and the World." In *Sciences Humaines et Intégration Européenne*, edited by Hendrik Brugman, Ladislav Cerych, and M.J. Lory, 379–85. Leiden: A.W. Sythoff, 1960.

———. *International Economic Co-operation*. Amsterdam & New York: Elsevier, 1945.

———. *International Economic Integration*. Amsterdam: Elsevier, 1954.

———. "Internationale socialistische politiek." *Socialisme en Democratie* 14, no. 11 (November 1957): 666–71.

———. "Kan hier te lande, al dan niet na overheidsingrijpen, een verbetering van de binnenlandse conjunctuur intreden, ook zonder verbetering van onze exportpositie? Welke leering kan ten aanzien van dit vraagstuk worden getrokken uit de ervaringen van andere landen?" In *Praeadviezen voor de Vereniging voor de Staathuishoudkunde en de Statistiek*, 62–110. The Hague: Nijhoff, 1936.

———. "Mathematiese Psychologie." *Mens en Maatschappij* 6, no. 4 (1930): 342–52.

———. *On the Theory of Economic Policy*. Contributions to Economic Analysis 1. Amsterdam: North-Holland Publishing Company, 1952.

———. "Oorzaken en Bestrijding der Werkloosheid." *De Socialistische Gids* 16, no. 3 (March 1931): 169–80.

———. "Opmerkingen over ruiltheorie I." *De Socialistische Gids* 13, no. 5 (May 1928): 431–45.

———. "Opmerkingen over ruiltheorie II." *De Socialistische Gids* 13, no. 6 (June 1928): 539–48.

———. "Over de Organisatie van Statistsiche Onderzoek ten behoeve der Conjunctuurbeheersching." Centraal Bureau voor de Statistiek, April 11, 1943.

———. *Shaping the World Economy: Suggestions for an International Economic Policy*. New York: Twentieth Century Fund, 1962.

———. "The Impact of European Economic Community on Third Countries." In *Sciences Humaines et Intégration Européenne*, edited by Hendrik Brugman, Ladislav Cerych, and M.J. Lory, 386–98. Leiden: A.W. Sythoff, 1960.

———. "The Theory of the Optimum Regime." In *Economic Models, Estimation and Risk Programming: Essays in Honor of Gerhard Tintner*, edited by Karl A. Fox, Jati K. Sengupta, and G.V.L. Narasimham, 133–89. Berlin: Springer-Verlag, 1959.

Tjeenk Willink, Herman. *Groter Denken, Kleiner Doen: Een Oproep*. Amsterdam: Prometheus, 2019.

Toirkens, José. *Schijn en Werkelijkheid van het Bezuinigingsbeleid 1975—1986*. Deventer: Kluwer, 1988.

Tönnies, Ferdinand. *Community and Civil Society*. Edited by Jose Harris. Translated by Jose

Harris and Margaret Hollis. Cambridge Texts in the History of Political Thought. Cambridge, UK: Cambridge University Press, 2001.

Trappenburg, Margo. "Hoe Elco Brinkman alsnog zijn zin kreeg: neoliberalisme, communitarisme en linkse idealen in de Nederlandse gezondheidszorg." *Sociologie* 15, no. 3 (2019): 289–307. https://doi.org/10.5117/soc2019.3.004.trap.

Tresch, John. "Cosmologies Materialized: History of Science and History of Ideas." In *Rethinking Modern European Intellectual History*, 153–72. Oxford: Oxford University Press, 2014. https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780199769230.001.0001/acprof-9780199769230-chapter-8.

Tribe, Keith. *Strategies of Economic Order: German Economic Discourse, 1750-1950*. Cambridge, UK: Cambridge University Press, 1995.

Troeltsch, Ernst. "Die Krise Des Historismus." *Die Neue Rundschau* 33 (1922): 572–90.

Tromp, Bart. "Een stap naar een praktische ideologie." *Socialisme en Democratie* 36, no. 1 (1979): 21–27.

———. "Participatie-democratie en participatie: vermeende oplossingen en echte problemen." *Socialisme en Democratie* 37, no. 4 (April 1980): 159–65.

———. "Socialisme, organisatie en democratie." *Socialisme en Democratie* 33, no. 4 (April 1976): 155–72.

Tucker, Aviezer. *Our Knowledge of the Past: A Philosophy of Historiography*. Cambridge, UK: Cambridge University Press, 2004. https://doi.org/10.1017/CBO9780511498381.

Tuin, Peter van der. "Loonmatiging heft onze werkloosheid snelst op." *De Telegraaf*, November 22, 1975.

Turner, Fred. *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*. Chicago: University of Chicago Press, 2006.

Turpijn, Jouke. *80's Dilemma: Politieke Vervreemding Van De Jaren Tachtig*. Amsterdam: Bert Bakker, 2011.

Uebel, Thomas. "Incommensurability, Ecology, and Planning: Neurath in the Socialist Calculation Debate, 1919–1928." *History of Political Economy* 37, no. 2 (2005): 309–42. https://doi.org/10.1215/00182702-37-2-309.

———. "Introduction: Neurath's Economics in Critical Context." In *Otto Neurath: Economic Writings, Selections 1904-1945*, edited by Thomas Uebel and Robert S. Cohen, 1–108. Vienna Circle Collection. Dordrecht: Kluwer, 2004.

Uyl, Joop den. "Amsterdamse School en economische politiek." *Socialisme en Democratie* 37, no. 1 (January 1980).

———. "De smalle marge van democratische politiek." In *Inzicht en uitzicht: Opstellen over economie en politiek*, 21. Amsterdam: Bert Bakker, 1978.

———. "Micro-elektronica als politiek probleem." *Socialisme en Democratie* 37, no. 3 (March 1980): 121–26.

———. *Tegen de stroom in*. Amsterdam: Trommel, 1981.

Uyl, Joop den, Aad Kosto, Max Albrecht, Jaap Burger, Hans Daudt, Ivo Samkalden, Sjeng Tans, Ed van Thijn, Maurits Troostwijk, and Anne Vondeling. *Een Stem die telt: Vernieuwing*

*van de parlementaire democratie*. Amsterdam: Arbeiderspers, 1967.

Van Horn, Robert, Philip Mirowski, and Thomas A. Stapleford. *Building Chicago Economics: New Perspectives on the History of America's Most Powerful Economics Program*. Cambridge, UK: Cambridge University Press, 2011.

Varisli, Munise. "Genzen aan de Groei? Sociaal-economische debatten in Nederland in de jaren 1971-1983." Master-thesis, University of Amsterdam, 2018.

Veld, Roel in 't. "De toekomstige effectiviteit van de Partij van de Arbeid." *Socialisme en Democratie* 36, no. 4 (April 1979): 161–72.

Veraart, Frank. "De domesticatie van de computer in Nederland 1975—1990." *Studium: Tijdschrift voor Wetenschaps- en Universiteits-geschiedenis | Revue d'Histoire des Sciences et des Universités* 1, no. 2 (June 1, 2008): 145–64.

Verbruggen, Johan. *Van Macro naar Meso: Een trendmatige ontwikkeling in de Nederlandse econometrische modelbouw*. Groningen: Wolters-Noordhoff, 1992.

Vermaat, Arend. "Discussie naar aanleiding van Friedman en Den Uyl; vijf vragen aan acht economen. Repliek van Prof. dr. A.J. Vermaat." In *Bedreigde Democratie? Parlementaire democratie en overheidsbemoeienis in de economie*, edited by Hans Daudt and E. Van der Wolk, 96–103. Amsterdam: intermediair, 1978.

Vermeulen, Frank. "De zaligverklaring van René R." *NRC Handelsblad*. October 22, 1988.

Verwey-Jonker, Hilda. "Vijfentwintig jaar socialistische theorie." In *Ir. J.W. Albarda, Een kwart eeuw parlementaire werkzaamheid in dienst van de bevrijding der Nederlandse arbeidersklasse*, edited by Emanuel Boekman and Herman Bernard Wiardi Beckman, 330–48. Amsterdam: Arbeiderspers, 1938.

Vieille Blanchard, Elodie. "Modelling the Future: An Overview of the 'Limits to Growth' Debate." *Centaurus* 52, no. 2 (2010): 91–116. https://doi.org/10.1111/j.1600-0498.2010.00173.x.

———. "Technoscientific Cornucopian Futures versus Doomsday Futures: The World Models and The Limits to Growth." In *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, edited by Jenny Andersson and Eglė Rindzevičiūtė, 92–114. New York: Routledge, 2015.

Visser, Jelle, and Anton Hemerijck. *A Dutch Miracle: Job Growth, Welfare Reform and Corporatism in the Netherlands*. Amsterdam: Amsterdam University Press, 1997.

Visser, Wessel, and Rien Wijnhoven. *Baan Brekende Politiek: De achterkant van de massale werkloosheid*. Kampen: Kok Agora, 1989.

Volleberg, Herman. "Betwistbare (On)Zekerheid: Het nut van geobjectiveerde duurzame risico's." *Tijdschrift voor politieke ekonomie* 18, no. 4 (1995): 83–93.

Vorrink, Koos. "De zaal moet vol!" *Het Volk*. May 17, 1935.

———. *Feestcultuur: eenvoudige practische wenken voor het organiseren van vergaderingen en feestelijke samenkomsten*. Amsterdam: Culturele Raad van N.V.V. en S.D.A.P, 1935.

Vos, Hein. *Het Plan van de Arbeid: Basis en Bouw*. Amsterdam: Uitgave Centrale Plan-Commissie, 1936.

———. *Voorontwerp van Wet op de Bedrijfschappen*. The Hague: Algemeene Landsdrukkerij,

1945.

Vosskühler, Karel E. "Overdracht van technologie en internationale arbeidsverdeling: de toenemende noodzaak van publieke controle." *Socialisme en Democratie* 34, no. 9 (September 1977): 417–28.

Vossoughian, Nader. *Otto Neurath: The Language of the Global Polis*. Rotterdam: NAi Publishers, 2008.

Vries, Annick de, Willem Halffman, and Rob Hoppe. "Policy Workers Tinkering with Uncertainty: Dutch Econometric Policy Advice in Action." In *Working for Policy*, edited by Hal K. Colebatch, Rob Hoppe, and Mirko Noordegraaf, 91–109. Amsterdam: Amsterdam University Press, 2010.

Vries, Gerard de. "What Is Political in Sub-Politics?: How Aristotle Might Help STS." *Social Studies of Science* 37, no. 5 (October 2007): 781–809.

Vries, Tity de. *Complexe Consensus: Amerikaanse en Nederlandse intellectuele in debat over politiek en cultuur, 1945-1960.* Hilversum: Uitgeverij Verloren, 1996.

VSS, Vereeniging voor de Staathuishoudkunde en de Statistiek. *Verslag van de algemeene vergadering gehouden te Amsterdam op zaterdag 24 October 1936*. The Hague: Martinus Nijhoff, 1936.

———. *Verslag van de Algemene Vergadering gehouden te Utrecht op zaterdag 30 october 1937*. The Hague: Nijhoff, 1937.

Waard, Michèle de. "Trudy van Asperen en het bedreigde burgerschap; 'De ethicus is geen brandweerman.'" *NRC Handelsblad*. December 14, 1990.

Wang, Jessica. "Scientists and the Problem of the Public in Cold War America, 1945-1960." In *Science and Civil Society*, edited by Lynn K. Nyhart and Thomas Broman, 323–47. Osiris 17. Chicago: University of Chicago Press, 2002.

Warde, Paul, and Sverker Sörlin. "Expertise for the Future: The Emergence of Environmental Prediction c. 1920-1970." In *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, 38–62. New York: Routledge, 2015.

Waring, Marilyn. "Counting for Something! Recognising Women's Contribution to the Global Economy through Alternative Accounting Systems." *Gender and Development* 11, no. 1 (2003): 35–43.

Weber, Max. *Economy and Society*. Berkeley: University of California Press, 1978.

———. "Science as Vocation." In *Max Weber's Complete Writings on Academic and Political Vocations*, edited by John Dreijmanis, translated by Gordon C. Wells, 25–52. New York: Algora Publishing, 2008.

———. "The Politician's Work." In *Charisma and Disenchantment: The Vocation Lectures*, edited by Paul Reitter and Chad Wellmon, translated by Damion Searls. NYRB Classics. New York: New York Review of Books, 2020.

Weeda, Arnoud. "Van economendebat tot economiediscussie." *Socialisme en Democratie* 36, no. 1 (January 1979): 3–15.

Weijden, Carel van der. "Naar een andere economische orde?" *Economische en Statistische Berichten* 60, no. 3030 (March 12, 1975): 1168–75.

Weijers, Ido. "De binnenhuisarchitecten van de Nederlandse verzorgingsstaat. Menswetenschappers en doorbraak." *Gewina: Tijdschrift voor de Geschiedenis der Geneeskunde, Natuurwetenschappen, Wiskunde en Techniek*, no. 24 (2001): 196–206.

———. *Terug naar het Behouden Huis: Romanschrijvers en wetenchappers in de jaren vijftig.* Amstedam: Uitgeverij SUA, 1991.

Weijers, Ido, Claus Offe, Pierre Rosanvallon, and Siep Stuurman. *Consensus of Strijd*. Somso/Staatsdebat, Vol. 4. Amsterdam: Siswo, 1986.

Weintraub, E. Roy. *How Economics Became a Mathematical Science*. Durham, NC: Duke University Press, 2002.

White, Hayden. *Metahistory: The Historical Imagination in Nineteenth-Century Europe.* Baltimore: Johns Hopkins University Press, 1973.

White, Hayden V. "The Burden of History." *History and Theory* 5, no. 2 (1966): 111–34. https://doi.org/10.2307/2504510.

Whyte, Jessica. *The Morals of the Market: Human Rights and the Rise of Neoliberalism*. New York: Verso, 2019.

Wijnberg, Rob. "CPB-Bingo." *De Correspondent*, September 29, 2013.

Wilde, Rein de. *De voorspellers: een kritiek op de toekomstindustry*. Amsterdam: Uitgeverij De Balie, 2000.

Williams, David, and Tom Young. "Governance, the World Bank and Liberal Theory." *Political Studies* 42, no. 1 (March 1, 1994): 84–100. https://doi.org/10.1111/j.1467-9248.1994.tb01675.x.

Wilts, Arnold. "Economie als Maatschappijwetenschap: Een sociologische geschiedenis van de economische wetenschap in Nederland (c. 1930-1960)." University of Amsterdam, 1997.

Winner, Langdon. "Do Artifacts Have Politics?" *Daedalus* 109, no. 1 (1980): 121–36.

Winock, Michel. "La Deuxième Gauche Dans l'histoire Du Socialisme." *Le Débate*, 2019.

Winsberg, Eric. "Simulated Experiments: Methodology for a Virtual World." *Philosophy of Science* 70, no. 1 (2003): 105–25. https://doi.org/10.1086/367872.

Wittgenstein, Ludwig. *Philosophical Investigations*. Translated by Elizabeth Anscombe. Oxford: Basil Blackwell, 1953.

Wolfe, Audra J. *Competing with the Soviets: Science, Technology  and the State in Cold War America*. Baltimore: Johns Hopkins University Press, 2013.

Wolff, Michael. "Hegel's Organicist Theory of the State: On the Concept and Method of Hegel's 'Science of the State.'" In *Hegel on Ethics and Politics*, edited by Nicholas Walker, Otfried Höffe, and Robert B. Pippin, 291–322. The German Philosophical Tradition. Cambridge, UK: Cambridge University Press, 2004. https://doi.org/10.1017/CBO9780511498176.013.

Wolff, Pieter de. *Rapport van de Commissie Voorbereiding Onderzoek Toekomstige Maatschappij-Structuur*. The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1970.

Wolfson, Dick. "Op zoek naar een aanvaardbare verdeling: Een beschouwing over het arbitraire karakter van criteria over de inkomensverdeling." In *Economische Theorie en Econo-

*mische Politiek in Discussie*, edited by Wim Driehuis, 275–306. Leiden: Stenfert Kroese, 1977.

Wolfson, Dick, and B. Le Blanc. "Een linkse norm." *Socialisme en Democratie* 33, no. 2 (February 1976): 50–66.

World Commission on Environment and Development. *Our Common Future*. Oxford: Oxford University Press, 1987.

WRR, Wetenschappelijke Raad voor Regeringsbeleid. *Allochtonenbeleid*. Rapporten aan de Regering 36. The Hague: Sdu Uitgeverij, 1989.

———. *Beleidsgerichte toekomstverkenning. Deel I: Een poging tot uitlokking*. Rapporten aan de Regering 19. The Hague: Staatsuitgeverij, 1980.

———. *Duurzame risico's: een blijvend gegeven*. Rapporten aan de Regering 44. The Hague: SDU Uitgeveri, 1994.

———. *Een werkend perspectief: Arbeidsparticipatie in de jaren '90*. Rapporten aan de Regering 38. The Hague: Sdu Uitgeverij, 1990.

———. *Etnische minderheden*. Rapporten aan de Regering 17. The Hague: Staatsuitgeverij, 1979.

———. *Maken wij er werk van? Verkenningen omtrent de verhouding tussen actieven en niet-actieven*. Rapporten aan de Regering 13. The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1977.

———. *Milieubeleid: strategie, instrumenten en handhaafbaarheid*. Rapporten aan de Regering 41. The Hague: SDU Uitgeveri, 1992.

———. *Plaats en toekomst van de Nederlandse industrie*. Rapporten aan de Regering 18. The Hague: Staatsdrukkerij Uitgeverijbedrijf, 1980.

———. *Van de stad en de rand*. Rapporten aan de Regering 37. The Hague: Sdu Uitgeverij, 1990.

Wunder, Bernd. "Bürokratie: Die Geschichte Eines Politischen Schlagwortes." In *Verwaltung Und Ihre Umwelt: Festschrift Für Thomas Ellwein*, edited by Adrienne Windhoff-Héritier, 277–301. Wiesbaden: VS Verlag für Sozialwissenschaften, 1987.

Wynne, Brian. "May the Sheep Safely Graze? A Reflexive View on the Expert-Lay Divide." In *Risk, Environment and Modernity: Towards a New Ecology*. Theory, Culture & Society. London: SAGE Publications Ltd, 1996.

Zalm, Gerrit, and Johan Verbruggen. "National Accounts and Modelling at the Central Planning Bureau." In *The Value Added of National Accounting: Commemorating 50 Years of National Accounts in the Netherlands*, 151–66. The Hague: Netherlands Central Bureau of Statistics, 1993.

Zamora, Daniel. "Finding a 'Left Governmentality': Foucault's Last Decade." In *Foucault, Neoliberalism, and Beyond*, edited by Stephen W. Sawyer and Daniel Steinmetz-Jenkins, 53–72. London: Rowman & Littlefield Publishers, 2019.

Zanden, Jan Luiten van. "De spagaat van het Centraal Planbureau." Mejudice, December 24, 2010. http://www.mejudice.nl/artikelen/detail/de-spagaat-van-het-centraal-planbureau.

———. *The Economic History of The Netherlands 1914—1995: A Small Open Economy in the "Long" Twentieth Century*. Routledge Contemporary Economic History of Europe. London: Routledge, 1998.

Zijlstra, Jelle. "Het belang van vaste beleidsbakens." In *Het Sociaal-Economisch Beleid in de Tweede Helft van de Twintigste Eeuw. Opstellen aangeboden aan Prof. d. F.W. Rutten*. Groningen: Wolters-Noordhoff, 1990.

Zoeteman, Kees. *Gaiasophy: An Approach to Ecology*. Hudson, NY: Lindisfarne Press, 1991.

Zwan, Arie van der. "Over de vergroting van de omweg in de produktie en de bekorting van de omlooptijd van het in bedrijven geïnvesteerde vermogen (Deel I)." *Economische en Statistische Berichten*, January 28, 1976.

———. "Over de vergroting van de omweg in de produktie en de bekorting van de omlooptijd van het in bedrijven geïnvesteerde vermogen (Deel III)." *Economische en Statistische Berichten*, February 8, 1976.

———. "Wederopbouw en mobilisatie-politiek." *Socialisme en Democratie* 38, no. 11 (November 1981): 518–31.

Zweeden, A. F. van. "De moeilijke start van 'Nederland B.V.'" *NRC Handelsblad*. February 27, 1982.

———. "Kritiek op eenzijdige analyse van Centraal planbureau." *NRC Handelsblad*. March 20, 1975.

———. "Spoorboekje Planbureau geen goede grondslag voor beleid." *NRC Handelsblad*. June 18, 1977.

# *Summary*

What ever happened to the future? Since the 1990s, when Francis Fukuyama's "end of history" thesis came into vogue, the idea grew that history would not develop beyond liberalism and globalism. As a result, the faith that the future would bring a radical change diminished. This development is most evident in economic planning—once a radical theory of how the free market would be replaced by a state-led economy, economic planning has become a theory of the perpetuating present, propagating that the economic system should not be reformed too drastically. This thesis inquires how development of economic planning has shaped our conception of the future, and consequently our conception of politics. To this end, it describes the history of Dutch social-economic planning in relation to the changing conceptions of history in the 20th century. In particular, the thesis focuses on the history of the Dutch Central Planning Bureau (CPB) and its role as prominent economic advisors to the government. The CPB's planning models provide an excellent study object to understand how the theory and practice of planning have shaped the political imaginary in relation to the future. This history, I will argue, is tied up with the fate of the state as a political actor—a political institution whose power seems to be waning in an ever more globalised world but once thought of as the main platform from which planning programmes would commence. Insight in the interrelated development of planning and state is therefore crucial for understanding the current conception of the future.

Combining literature from science and technology studies (STS), intellectual history and the history of science, the first chapter sets out to understand the concepts of "history" and "the state", their interrelation, and the role of planning in this interrelation. Following the writings of Reinhart Koselleck, I define planning fundamentally as a historical science. That is to say, planning connects the space of political action to expectations of the future, thus providing a meaning to the development of history. Doing so, planning develops, what I call a *decisionist imaginary*. Planning is not only a practice that maps out political decisions in relation to developments of the economy or society, but it also (implicitly) denotes who should take that decision, by which authority and on the basis of what information. As such, planning theories contain an imaginary of what the state, democracy and scientific expertise are. By studying the conceptual development of the notions "history", "state", "democracy" and "scientific expertise" in relation to the practice of planning, it becomes clear how planning shapes our conception of historicity.

The second chapter discusses early debates on economic planning in the interwar period. Dispelling some misunderstandings about planning as an inherent technocratic programme, I emphasise the ethical concerns that are present in the early planning debates by discussing the works of Otto Neurath and Jan Tinbergen. These ethical concerns, I argue, should be understood as stemming from a particular self-conception, or scholarly persona, of the scientist. In the interwar period, scientists started to understand themselves as agents of modernity. That is to say, scientists conceived of science as a transformative force—changing traditional human communities into modern societies. Since modernity was both a force for good (allowing the emancipation of millions out of the shackles of heavy labour) and bad (alienating individuals through routinely work and bureaucratic rules), scientists saw it as their responsibility to fend off the ills of modernity whilst promoting the benefits. This ethical commitment strongly drove the early debates on planning. Since planning in this conception had to take the experiences of communities into account, straightforward relying on the bureaucratic powers of the state was out of the question. It forced planners to think about democracy and responsibility in decision making in economic planning.

In the two decades after the Second World War, under the shadow of the emerging Cold War, conceptions of state, democracy and expertise un-

derwent a dramatic shift in meaning, as I describe in the third chapter. Underlying this shift is the changing conception of the notions of progress and ideology. Both notions came under suspicion in the politics of the Cold War. Instead of these notions, that often formed the guiding principles for the political programs in the first half of the 20th century, the idea of utopia gained prominence during the Cold War. Using newly developed research-techniques based on rule-bound rationality (often called Cold War rationality), social scientists conceptualised utopia as a dynamic-equilibrium that could be reached in the near future. These ideas and the application of Cold War rationality tools shaped the early planning efforts of the Dutch CPB. In developing so-called *decision models*, the CPB started to emphasise individual preferences and behaviours as the guiding principle for the development of social-economic policies. However, this new concept of planning had strong implications for the idea of democracy—gradually side-lining the more conversational and deliberative elements of democracy in favour of the idea of the individual as a rule-following economic agent.

The two decades after the Second World War saw exceptional economic growth. Broad coalitions between liberals, Christian democrats and social democrats ushered in an era where economies were planned but capitalism could thrive. All this, however, was thrown off balance when the long-term consequences of this exponential growth became visible on the horizon of the future. As I argue in the fourth chapter, the expectation of dramatic events such as environmental pollution and the depletion of natural recourses caused a reconceptualization of the notions of history and democracy. Koselleck argued that the future had become radically open since unprecedented events were to be expected, whilst Jürgen Habermas argued that policymaking decisions relating to a long-term outlook of society had to involve citizen participation. Analysing the debates on social planning in the Netherlands from 1965 to 1975, I argue that elite policymakers attempted to incorporate these concerns for the future and demands for democracy into new planning models. The CPB developed on the basis of system dynamics the so-called *integral model* in which they envisioned democratic participation as a complex web of cybernetic feedback loops. Adopting a cybernetic vision of society, the CPB presented a planning mode in which the dynamic relationship between the plurality of individual future images could be translated into a singular collective future vision of the Dutch state.

At the start of the 1970s, the CPB had envisioned social planning and

democratisation as a complex web of feedback loops. However, such a vision of society became highly suspect after the stagflation crisis of the mid-1970s. In the fifth chapter, I describe how social democrats and neoliberals alike applied a rational choice theory to argue that shadowy agents of industry leaders and interest groups were pulling the strings behind the complex web of decision-making—excluding the input of the average Dutch citizen. Neoliberal authors argued that under the auspice of social planning and democratisation the welfare state had been growing at a dangerous rate—threatening to trample the private sector; ending free enterprise and democracy. In order to avert such a doom-scenario, it was necessary to restrain the growth of the state. To this end, the neoclassical growth models of the CPB, the so-called VINTAF-models, with their mid-term forecasts proved to be useful since they could bind the state to a mid-term regime of fiscal restraint. By restraining the state, neoliberals hoped that civil society would find new channels to achieve their emancipatory demands. Technological innovation, especially in the forms of the personal computer, was for such a purpose a particular promising channel.

For all the techno-optimism neoliberals had at the start of the 1980s, with dreams of a decentralised civil society, the multiple crisis-narratives continued to dominate the decade. Problems of environmental pollution did not go away and the economic malaise continued. A new crisis emerged, namely, that of the ideology of the welfare state. In the shared analysis among both the New Left and neoliberals, it seemed that the state could no longer be trusted to solve the crisis of the future. As I show in the sixth chapter, countering this crisis-narrative, a new discourse on citizenship arose in the 1990s. In an ever-increasing globalised world, ticklish issues such as global warming could only be tackled only through shared responsibility and co-ordination of citizens, businesses and the state. Planning in this conception of citizenship had the chief task to design a framework in which such a collaboration of public and private actors was possible. As I attempt to show through a detailed analysis of the drafting of new environmental policies, the development of more state-oriented policies was sabotaged by advancing these new ideas of citizenship and globalisation. Instead, a new policy-paradigm arose in which the individual choices and preferences had to be leading in environmental policy. Planning had to provide an optimistic long-term outlook in which individual actions could work in tandem with the forces of globalisation towards sustainable development. However, this also entailed

an ever-receding future with a growing gap between the space of political action and the horizon of future expectations. Following the ideas of François Hartog, I argue that this future outlook gave way to a sense of presentism: the prevailing mentality that the future would not be different from the present or the past.

In the conclusion, I describe the peculiar predicament of the present times. History is still on the move, with the current climate crisis and the climate disasters that are expected in the near future. At the same time, what the political collective is that can inaugurate or change the future is unclear. To put it in more dramatic terms, the agent of history has gone missing, or can no longer be identified with any human agent. This disappearance of the subject of history, I argue, has everything to do with the vanishing of the state as a symbolic actor from our recent image of politics. Both economic planning and political theory have contributed to the obscuring of the state in the political imagination. I therefore present this thesis as an encouragement to start thinking about the state once again.

# *Samenvatting*

Economische planning was ooit een radicaal idee om de mechanismes van de vrije markt te vervangen door een centraal geleide coördinatie van de staat. In die hoedanigheid wordt het plannen van de economie nog steeds geassocieerd met de meerjarenplannen van de Sovjet-Unie en andere communistische landen. Echter in het Nederland van nu wordt economische planning opgevat als het stimuleren van de economie in termen van economische groei en het bewaken van de staatsfinanciën. Hoe is deze opvatting van economische planning als een radicaal alternatief voor de toekomst verworden tot het verstandig managen van de economie en het juist verhinderen van een radicale verandering? In dit proefschrift zal ik betogen dat deze veranderde opvatting van planning sterk verbonden is met een groter meer algemeen gedachtegoed over toekomst in relatie tot politiek. Begin 20$^{ste}$ eeuw was het idee dat de geschiedenis onvermijdelijk werd voortgedreven door de moderniteit nog wijdverbreid. Moderniteit zou meer gelijkheid en vrijheid brengen; socialisten propagandeerden de droom dat oude economische relaties plaats zouden maken voor nieuwe meer rechtvaardige relaties. Tegenwoordig lijkt het idee dat massapolitiek radicale verandering zou kunnen bewerkstelligen gemarginaliseerd. Het idee van een radicaal andere toekomst komt ons steeds ongeloofwaardiger voor. Dit is niet enkel een ontwikkeling van het economisch denken. Onze cultuur is doorspekt met nostalgie. Uit het steeds heropvoeren van cultuurproducten uit het verleden (zie de eeuwige Star Wars franchise), spreekt een wens tot behoud en niet

tot verandering. In geschiedfilosofie (zoals in het werk van François Hartog) spreekt men van *presentisme*, de neiging om verleden en toekomst enkel als continuaties van het heden te begrijpen zonder breekpunt of radicale omwenteling.

In die zin lijkt het lot van economische planning in Nederland onderdeel van een grotere historische ontwikkeling over hoe er in Westerse samenlevingen over de toekomst wordt nagedacht. Ik wil in dit proefschrift echter betogen dat economische planning actief heeft bijgedragen aan deze ontwikkeling. Om dat te begrijpen moet planning niet enkel worden opgevat als een techniek om economieën te coördineren of te managen, maar als een sociaal-technisch imaginair (*sociotechnical imaginary*) zoals getheoretiseerd in het werk van Sheila Jasanoff. Zoals ik betoog in het eerste hoofdstuk, is economische planning in de kern een techniek die de consequenties en onzekerheden van staatsbeslissingen in kaart brengt. Echter in die hoedanigheid geeft planning ook vorm aan wat staatsacties precies zijn, in naam van wie ze worden genomen, door wie en aan welke beperkingen deze acties zijn gebonden. In andere woorden, planning helpt in de verbeelding van wat de staat precies is, kan en doet, en hoe staatacties gebonden zijn, enerzijds, aan democratische besluitvorming en, anderzijds, aan wetenschappelijke expertise. In de Nederlandse politieke cultuur is economische planning daarom een belangrijk instituut dat politiek beleid verbeeld in termen van oorzaak en gevolg en daarmee denkbaar en bediscussieerbaar maakt.

Dit proefschrift brengt planningsinstrumenten en politieke debatten uit verschillende kritische periodes uit de Nederlandse geschiedenis in kaart en laat daarmee zien hoe voor de politieke besluitvorming in de loop van de 20ste eeuw door planning is verbeeld en daarmee het idee van de toekomst heeft vormgegeven. In het bijzonder richt ik me daarbij op de geschiedenis van het Centraal Planbureau (CPB, opgericht in 1945), die heden ten dage het belangrijkste adviesorgaan van de Nederlandse overheid op het gebied van economische kwesties.

Om de ontwikkeling van de verbeelding van de toekomst in kaart te brengen, van een geloof in een radicale toekomst naar een gelatenheid in een eeuwige voorzetting van het heden, begin ik in het interbellum toen modernistische ideeën over de ontwikkeling van de geschiedenis nog breed werden gedeeld. Het was in de context van deze geschiedsopvatting dat het programma van economische planning postvatte. Zoals ik betoog in het tweede hoofdstuk, had de modernistische geschiedsopvatting een specifieke vorm die de eerste voorstellen tot economische planning diep beïnvloedde. Door het werk van twee prominente planeconomen uit het interbellum,

Otto Neurath en Jan Tinbergen, te vergelijken, blijkt dat planning niet een naïeve omarming van het idee was dat de moderniteit de samenleving positief zou veranderen. Planeconomen waren zich ervan bewust dat de moderniteit niet alleen vooruitgang bracht, maar ook vervreemding; traditionele samenlevingsverbanden werden ondermijnd en de mens werd opgesloten in een stalen behuizing (*stahlhartes Gehäuse* in Max Webers termen) van mechanische rationaliteit. De geschiedenis ontwikkelde zich onvermijdelijk naar een rationele toekomst, maar het was de taak van de moderne wetenschapper (zoals de planeconomen zichzelf zagen) om deze ontwikkeling te sturen en de negatieve consequenties van de moderniteit af te wenden. Planeconomen omarmden het moderne lot, maar zagen moderniteit ook als een opdracht aan de wetenschapper om dit lot tot een goed einde te brengen.

Dit geloof en de omarming van moderniteit als de motor van de geschiedenis begon krassen te vertonen na de verschrikkingen van de Tweede Wereld Oorlog en de diepe armoede waar Europa zich in bevond tijdens de wederopbouwperiode. Niet zozeer dat men niet meer geloofde in de moderniteit als de beweging van de geschiedenis, maar of deze moderniteit nog tot een goed einde gebracht kon worden door collectieve politiek en wetenschappelijke rationaliteit, werd ernstig in twijfel getrokken. Zoals duidelijk wordt in het derde hoofdstuk, werden individuele keuzes in de politieke cultuur van de Koude Oorlog, geconceptualiseerd als *het* alternatief voor het collectivisme van de Sovjet-Unie. Enkel individuele preferenties en persoonlijke normatieve ordes konden de totalitaire tendensen van het modernisme afwenden en de weg wijzen naar een betere samenleving. Toen in Nederland het CPB werd opgericht volgden de planners deze nieuwe filosofie van moderniteit. Staatsacties werden in kaart gebracht middels wetenschappelijke technieken die rationaliteit als mechanisch en individueel opvatte, wat in de wetenschapsgeschiedenis *Koude Oorlog Rationaliteit* wordt genoemd. Planners geloofde nog immer dat de economie gerationaliseerd kon worden, maar het waren individuele actoren die de economie steeds efficiënter en eerlijker maakte. De staat fungeerde slechts als de regulator die de individuele acties in goede banen kon leiden en het individuele aanpassingsvermogen garandeerde.

De dominantie van het idee dat de geschiedenis zich noodzakelijkerwijs via een moderne weg ontwikkelt kwam definitief ten einde aan het einde van de jaren zestig. Geconfronteerd met sociale, economische en milieuproblematiek (zoals zo scherp verwoord in *The Limits to Growth* [1972] van de Club of Rome) bleek de naoorlogse politieke orde van Keynesiaanse planning en harmonie tussen werkgevers en werknemers niet langer houd-

baar. De geschiedenis leek zich steeds sneller te ontwikkelen: economische groei en modernisering bleken monsters te creëren die de moderne overheden niet meer konden bijbenen. Het gegeven dat overheden niet meer bij machte waren om moderniteit nog in de hand te houden, schiep ruimte voor vele sociale bewegingen (studentenprotesten, de tweede feministische golf, milieubewegingen) die meer macht opeisten. Als moderniteit niet langer meer de toekomst kon dicteren, ontstond er immers meer ruimte voor burgers en sociale bewegingen om vorm te geven aan de toekomst, ongehinderd door een deterministische loop van de geschiedenis. Sociale en economische planners in Nederland waren er snel bij om deze nieuwe democratische impuls te kanaliseren in nieuwe vormen van denken over de staat. De uitdaging was om alle uiteenlopende toekomstvisies die de nieuwe democratische bewegingen voortbrachten samen te smeden tot één singuliere visie. Planning en de staat zouden daarin wederom een centrale rol spelen: niet als vertegenwoordigers van de moderniteit maar als de synthese van de diverse visies op de toekomst van de samenleving. Met dat doel ontwikkelde het CPB eind jaren zestig en begin jaren zeventig *Systeem Dynamische* modellen die de samenleving als cybernetische systemen voorstelden. Deze ambitie vond, onder druk van het emancipatoire debat en de economische malaise van de midden jaren zeventig, echter nooit volledig doorgang.

Toen moderniteit in de zeventiger jaren als het leidend idee van de geschiedenis ten onder ging, werd de visie op de toekomst radicaal opengebroken. Burgers leken bevrijd van de moderniteit en konden de toekomst eindelijk naar eigen inzicht invullen. Precies in een tijd dat de staat als voorganger van de moderniteit ernstig in twijfel werd getrokken, reageerde Nederlandse planners door paradoxaal genoeg nog meer vormen van staatsplanning voor te stellen. Onvermijdelijk lokte deze reactie een tegenreactie uit in de vorm van het neoliberalisme. Vanaf de midden jaren zeventig krijgen neoliberale auteurs in Nederland een meer prominente stem in het publieke debat, die waarschuwde tegen het vele overheidsingrijpen dat inherent werd geacht aan toenemende planning. Neoliberalen vreesden dat een staat die alle toekomstvisies in een samenleving moest faciliteren zo groot zou worden dat een vrije markt met individuele keuzes onmogelijk zou worden en uiteindelijk zou uitmonden in een totalitaire staat. In deze ontwikkeling maakte het CPB een opmerkelijke draai. In plaats van het synthetiseren van toekomstvisies middels *Systeem Dynamische* modellen, begon de CPB in lijn met de neoliberale ideeën uit die tijd, zich ten doel te stellen om de groei van de staat aan restricties te onderwerpen. Budgetnormen voor overheidsfinanciën en neoklassieke groeimodellen bleken in deze omslag bij uitstek middelen om

de staat te beschermen tegen te veel invloed van maatschappelijke bewegingen. Als alternatief betoogde neoliberale auteurs dat de vrije markt en nieuwe communicatietechnieken (zoals de personal computer) veel beter in staat waren om de wensen van alle sociale bewegingen te faciliteren. Zo verkocht het neoliberalisme zichzelf als een emancipatoire politieke beweging: juist door de macht van de staat in te snoeren zou er meer ruimte voor de politiek van de sociale bewegingen ontstaan.

Wantrouwen tegen de staat als het vehikel van maatschappelijke verandering bereikte zijn hoogtepunt in het doemdenken van de jaren tachtig. Niet alleen leek de staat zijn vanzelfsprekende rol als de voorganger van de moderniteit te zijn verloren, de staat leek ook een obstakel te vormen voor nieuwe vormen van solidariteit die in een postindustriële samenleving gecultiveerd zouden moeten worden. Voor progressieve intellectuelen leek het daarom zaak om een emancipatoire politiek voorbij de staat voor te stellen. Vooral het Franse anti-totalitarisme debat uit de jaren tachtig bleek voor Nederlandse intellectuelen een bron van inspiratie. Uit deze discussie volgde een nieuw ideaal van sociaaleconomische planning: in plaats van het vormgeven van een gemeenschappelijke visie op de toekomst zou planning slechts op een decentraal niveau de coördinatie van individuele actoren moeten faciliteren. In de vormgeving van het milieubeleid van de jaren tachtig en negentig, gaven Nederlandse planningsinstituten, zoals het CPB, gehoor aan deze oproep door de individuele waardering van het milieu centraal te stellen. Middels prikkels en "nudging", ontworpen door planningsbureaus, zou de burger bijvoorbeeld verleid kunnen worden tot het internaliseren van normen voor een schoner milieu (*een beter milieu begint bij jezelf*). De staat had niet langer een rol in het tot stand brengen van een betere samenleving, enkel individuele burgers konden dat bereiken. De taak van de staat was slechts regeren, de boel bij elkaar te houden, deliberatie binnen het poldermodel mogelijk maken en zodoende een geleidelijke verbetering te faciliteren. Individuele burgers konden hun normen nog afstemmen op een radicaal open toekomst, maar men kon niet meer van de staat verwachten dat deze zou volgen. Het resultaat was een overwegende stemming onder politici dat de geschiedenis voorbij zou zijn.

In de conclusie van dit proefschrift heb ik de lessen van de hierboven beschreven geschiedenis naar het heden willen trekken. Zelfs als de moderniteit als vanzelfsprekende verwachtingshorizon is verdwenen, schrijdt de geschiedenis nog immer voort. Sterker nog, radicale visies op de toekomst hebben in absentie van modernistische ideeën alleen maar aan geloofwaardigheid gewonnen. Klimaatverandering en milieuvervuiling presenteren een

radicale verandering van een grootheid die de mensheid nog nooit eerder heeft gekend. Ondertussen is allerminst duidelijk welke actor de klimaat-catastrofe nog kan afwenden. In afwezigheid van een staat die collectieve actie verbeeldt, lijkt elke alternatieve vorm van collectiviteit impotent om een dergelijk probleem het hoofd te bieden.

Wat ik in de inleiding van dit proefschrift heb gediagnostiseerd als *presentisme* (het onvermogen om de toekomst als radicaal anders voor te stellen dan het heden) is zodoende innig verbonden met het verdwijnen van de verbeelding van de staat als actor in ons huidige politieke denken. Gezien geen geloofwaardig alternatief zich aandient, is het opnieuw nadenken over hoe we de staat verbeelden onontbeerlijk. In dat kader volstaat het niet om de staat enkel als een instituut van administratie en toezicht voor te stellen. We lijken te zijn vergeten dat de staat ook een instituut is die de verbeelding van collectieve actie mogelijk maakt. Denken over nieuwe vormen van plan-nen die de klimaatproblematiek een hoofd kunnen bieden is een uitstekende manier om weer na te denken over wat de rol van de staat zou moeten zijn onze huidige hachelijke situatie.