

# *Patterns of science/policy interaction in The Netherlands, 1990-20*

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## **Abstract**

This chapter focuses on the category of policy analysts who are located in advisory bodies as scientific experts, explicitly tasked as boundary workers in boundary organizations between science and policy/politics. A brief introduction (section 1) sets out the manifold and complex modes of science-informed policy advice in the Netherlands. These will be interpreted through a minimalist multilevel framework for science-informed policy advice as boundary work (section 2). At policy politics level (section 3), it will be argued that one may distinguish between advisory arrangements fit for (relatively) structured and (relatively) unstructured problems. At ideological level (section 4), at least three policy styles may be discerned: a neo-corporatist, a neo-liberal and a deliberative one. In the final section (5), it is argued that there is not one 'Dutch' model, but that the patterns co-evolve and permeate each other, although loaded with ideological and pragmatic disagreements and contradictions.

## **Introduction: Science-informed or expert policy advice in the Netherlands**

The traditional view casts *policy analysis* as advice on the authoritative choices that undergird public policies, by public servants in a public bureaucracy to political decision makers. (Colebatch et al., 2010). Meanwhile, this instrumental and cognitive conception provides an incomplete view of known practices in policymaking processes (Radin, 2000). Policy-related activities are now more broadly referred to as '*policy work*' (Colebatch et al., 2010; Kohoutek et al., 2013). This concept captures broader roles and activities involved in the making of public policies. First, they are not just cognitive, analytic and functional for political decisions, but also focus on the maintenance of structured political and administrative interactions such as mediation, communication, negotiation and coordination. Second, policy workers are not only located in public bureaucracies, but also in academe, the media, NGO's, or in the private sector, in lobby organizations or consultancies.

This chapters' focus is on a special category of policy workers: people working as scientific experts for public policy in advisory bodies and/or knowledge centers. Their capacity and status as experts is precisely derived from their credentials and position in, or knowledge of, science. *Qua experts* they are specifically tasked with translating or processing scientific evidence and thought into policy advice. This category of policy workers, apparently because of their scientific expertise, stays rather close to the traditional cognitive role of a policy analyst. But, different from all other types of policy workers, their role obliges them to act as '*boundary workers*' between science and policy-and-politics.

The Netherlands has many such *expert policy advisers as boundary workers* because the country knows a highly developed, complex and diverse infrastructure for science-informed policy advice. Through the Legal Framework for Advisory Bodies (Kaderwet Adviescolleges) of 1996, the Dutch have legally regulated the frequent use of science<sup>1</sup>-informed policy advice by national government. The law stipulates rules for establishing,

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<sup>1</sup> Contrary to standard use in English, the word 'science' is used here in its encompassing meaning of all academic knowledge: both the natural sciences, technological or engineering sciences, social sciences and the humanities.

composition, *modus operandi*, and terms of reference of so-called *permanent advisory bodies*. These bodies formally have either strategic or technical-specialist functions. In addition, there are *temporary advisory bodies*, established for four and maximum six years, devoted to politically salient but mid-term issues. Finally, there are *ad-hoc* or *one-off commissions*, devoted to one single issue (no yet covered by a permanent or temporary body), which require only a ministerial decree for their establishment.

Apart from advisory bodies called into being through the Framework Law, there are more traditional, bureaucracy-related sites and arrangements for science-informed policy advice. First, there are the so-called departmental ‘knowledge chambers’, chief scientific officers or chief scientists, or intermediary knowledge-and-advice institutes as agencies, like Syntens or Senter/Novem. Second, since the 1990s departments have increasingly used external consultancies (like McKinsey, or Berenschot) for knowledge-based policy advice. Third, there are advisory bodies that fulfil the so-called ‘planning bureau function’, major providers of science-informed advice to the three basic areas of sustainable development (Profit, Planet, and People) in government policies: : the Center for Economic Policy Analysis (Centraal Planbureau, CPB), the Netherlands Environmental and Nature Bureau (Planbureau voor de Leefomgeving, PBL)<sup>2</sup>, and the Netherlands Institute for Social Research (Sociaal en Cultureel Planbureau, SCP). These *de facto* independent and interdepartmental bureaus formally function as parts of departmental hierarchies of, respectively, the departments of Economic Affairs, Environment and Infrastructure, and Social Affairs. Fourth, strategic and future-oriented science-informed advice on overall and long-term government policy is provided by the Scientific Council for Government Policy (Wetenschappelijke Raad voor het Regeringsbeleid), which is an independent advisory body with a special relationship to the Prime Minister’s department of General Affairs. Fifth and finally, especially for socio-economic policy issues, the Government has established, in the late nineteen-forties already, the so-called Socio-Economic Council (Sociaal-Economische Raad, SER), consisting of representatives of labor unions, of employers’ associations, and of academe, mostly reputable professors of economics, representing the government (so-called Crown-members). The SER has its own highly knowledgeable staff. Government is obliged by law to request advice of the SER on socio-economic policy of sufficient political and policy relevance.

From this very brief overview (and the in-depth treatment in other chapters of this book) it should be clear that the sheer volume, complexity and diversity of the Dutch science-informed advice infrastructure beg the question: *how to make sense of different sorts of policy advisers involved in a variety of science-politics interactions, also over time? Is there more ‘system’ than meets the eye in this bewildering kaleidoscope of transactions between science-informed policy advisers and policymakers or politicians and administrators?* The answer proposed in this chapter is: *As the polity and the nature of fundamental policy issues change, so do modes of expert policy advice.*

The next sections in this chapter deal with the following topics. First, a minimalist (comparative) multilevel framework for expert advice as boundary work will be briefly set out. Second, the analysis turns to the levels of boundary arrangements and organizations as influenced by different types of policy politics and different policy domains with different types of problems. It will be shown that advisory boundary arrangements and organizations adapt to the larger policy-political landscapes in which their advice is to be used. Third, the level of political culture influences expert advice through ideologically preferred policy styles. In the Netherlands three ideological-epistemological patterns in styles of expert advice

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<sup>2</sup> PBL was in fact institutionalized in 2002 as autonomization of the pragmatic-advisory branch of the National Institute for Public Health and Environmental Hygiene (Rijksinstituut voor de Volksgezondheid and Milieuhygiëne, RIVM), a huge research lab working also for the Ministry of Health.

can be discerned: neo-corporatist, neo-liberal, and deliberative. Fourth and finally, some future challenges for research and practice are highlighted.

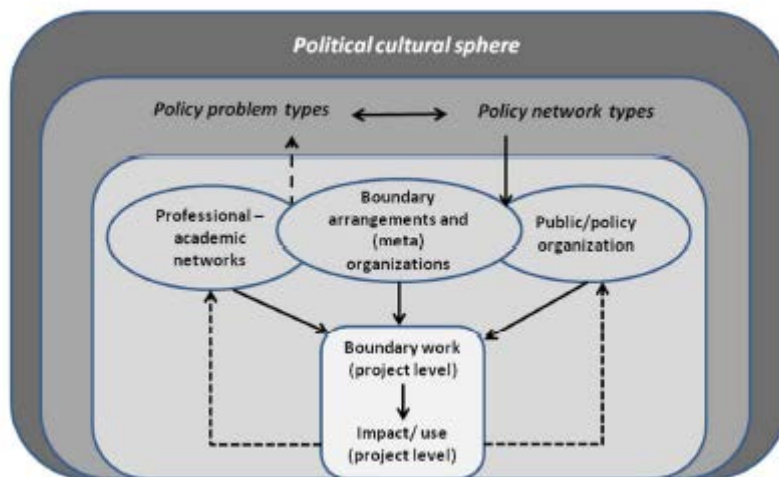
## **A minimalist framework of expert policy advice as boundary work**

Policy analysis as advice to decisionmakers implies (science-informed) knowledge utilization. Both natural and social scientists conceptualize the relationship between science and politics as knowledge transfer, dissemination, research use and impact on the policy process (Landry et al. 2001; Nutley 2007). This models everyday clichés in scientific ways. Policymakers and politicians like to suggest that they are ‘on top’, and call on the services of scientists and experts as policy analysts, which are just ‘on tap’. Scientists and science-oriented policy analysts continue to tell their myth about the objective, independent smart guys who dare to speak ‘truth to power’. However, both ‘sacred’ narratives neglect the ‘profane’ truth of the two-way, interdependent character of knowledge production and communication between experts and policymakers (Bijker et al., 2009). The production of knowledge and policy advice cannot be described in terms of clear boundaries between science and politics. From a macro-sociological perspective, science/politics interactions are ongoing co-productions (Jasanoff 2004) between the scientization of politics, and the politicization of science (Weingart 1983). Of course, at meso- and micro-levels this does not mean a complete blurring as in a seamless web. Given the need for participation from different institutional spheres, division of work is called for. However, such a division is not easily decided upon, let alone settled or stabilized.

To draw together usable insights from the older work on knowledge utilization and more recent research perspectives as co-production through boundary work (Hoppe 2005), this chapter uses a multilevel framework as heuristic for understanding policy analysis and advice as science-politics interaction (Hoppe 2010a). *Boundary work* can more formally be understood as attempts by actors to define practices in contrast to each other through *demarcation*, as well as to find productive *coordination* across these boundaries through a division of labour that is more or less stabilized because it has been accepted by relevant actors (Halffman, 2003). Demarcation and coordination are two sides of the same coin. Concern for high-quality performance makes expert advisors and policymakers mutually dependent; yet, they have to guard their separate identities and formal independence. Therefore, boundary work is full of paradoxes and dilemmas; the relationship will always be contested.

Boundary work can be depicted as science/policy interactions in a multilevel system. From a micro-agency perspective, science-politics boundary work is most clearly visible in specific policy advisory *projects* around particular topics. However, at meso-organizational level, projects are carried out by *boundary organizations* or *boundary arrangements*, the wide variety of hybrid organizations that straddle and mediate the boundary between professional-academic networks and public sector or policy organizations. At a next level of policy-political analysis, such boundary organizations usually cluster around the typical problems in an issue or policy network. These problem-and-network structures display a particular type of *policy politics*, and in turn are permeated by a *political-cultural sphere*, the characteristics of

which influence science-policy interfaces on all levels as *policy styles*<sup>3</sup>. To present a comprehensive picture of the science-policy interface in policy analysis and advice by experts, then, means to understand multilevel science-policy interactions and the ways these levels interact and interpenetrate (see Figure 1):



**Figure 1. Multilevel conceptual framework for understanding science/policy interactions**

## **Boundary arrangements, organizations and policy politics in expert advice**

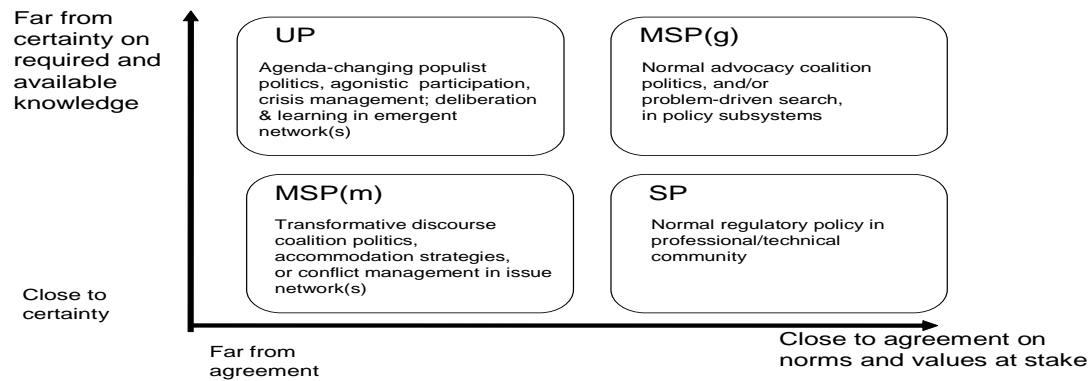
Policy networks, policy politics and boundary organizations (245 words)

Boundary organizations and arrangements should be viewed as part of larger policy networks. Such networks do have *policy issue politics*, i.e. the combination of types of cognitive processes (‘puzzling’) and the styles of competitive interaction (‘powering’) that are characteristic for policymaking in a particular domain (Hoppe, 2010). It will be shown how a particular type of policy issue politics influences and constrains types of effective boundary organizations and arrangements (Hoppe, 2010a). Depending on how political authorities, supported by policy advising staff and scientific experts and/or consultants, frame or structure the problem, different governance styles will prevail (see figure 2); and these will allow only certain types of boundary arrangements.

In the case of structured problems (SP - strong value consensus and informational certainty) a central-rational rule approach to governance permits ‘outsourcing’ problem solving to bureaucratic or scientific/professional, sometimes commercialized, closed epistemic (Haas 1992) and technical communities. In the case of unstructured or ‘wicked’ problems (UP - high value dissent and lasting deep informational uncertainties) an agonistic governance style will come about, allowing numerous and different types of stakeholders to play fluid roles, perhaps with flexible boundary arrangements as spaces for open deliberation

<sup>3</sup> Reasons of space prohibit a lengthy treatment of how political-epistemic cultures or policy styles influence advisory work on the other three levels. The best analogy probably is with ‘*intertextuality*’, interpreted as political-epistemic codes imparted through long-time traditions of shared understandings of previous policy conversations, debates and practices, in which work experience socializes the advisers. I thank Annalisa Pelizza for suggesting this idea to me.

and social learning. The in-between problem types of moderately structures problems with value consensus but considerable informational uncertainty (MSPg) or with value dissensus but high informational certainty (MSPm) generate yet different styles of policy politics (see figure 2).



**Figure 2. Problem types and types of policy politics (from Hoppe, 2010: 142, fig. 5.4)**

### Variation in expert advice as boundary work

As can be inferred from the introductory description, the array of hybrid, boundary-crossing institutional forms for science-politics interaction runs from legally established, highly institutionalized advisory councils like the Health Council (Bijker et al., 2009), or advisory bodies like the CPB, or the WRR (Halfman, 2009), to merged knowledge organizations or organizations-of-organizations like Alterra (for agriculture and environment; Van Egmond and Zeiss, 2010) or Deltares (for coastal and river management), to research ‘centers of excellence’ like NICIS (for urban research and policy), all the way to informal hybrid virtual forums where academics, professionals, businessmen and government officials meet around shared problems (like the website on the ‘coalition’ of CO<sub>2</sub>-neutral cities, or departmentally organized hybrid forums, Hoppe, 2008; Merckx, 2008). In other words, explicitly established and institutionalised boundary organisations for expert advice are but one manifestation of a much broader ‘twilight zone’ of hybrid arrangements that straddle the institutional boundaries between the sciences and politics.

Based on an extensive literature overview (Hoppe, 2005), and using Q Methodology to empirically assess the range of differences in Dutch expert advice practice, seven types of discourse on boundary work capture the variety of science-politics (Hoppe, 2008):

*Rational facilitation of political accommodation:* a discourse used by experienced, prominent members of advisory bodies, or civil servants attending to look-out and knowledge functions in departmental agencies; they strongly believe in Dutch consensus-type democratic practices of flexibility and compromise; they feed this accommodation process with arguments derived from both sound science and knowledge rooted in ‘best practices’; they facilitate orderly

transgressions between science and politics in an atmosphere of mutual trust (Den Hoed and Keizer, 2007).

*Knowledge brokerage*: a discourse in use by civil servants or consultants (De Wit, 2011; Bouwmeester, 2010; Schulz, 2010) who, in spite of well-known cognitive impairments of politics and bureaucracy, and under favourable conditions exploit opportunities for instrumental policy learning.

*Mega-policy strategy*: the typical discourse of expert advisors in government-oriented or commercial think-tank functions; they verify and critically examine long-term strategic policy guidelines and pivotal assumptions in policy beliefs-in-use, in light of most recent sound science and argument (Scholten, 2008; Den Hoed and Keizer, 2010).

*Policy analysis 'avant la lettre'*: a discourse used by expert advisors working in the long-standing pragmatic relations and rules-of-the-game of established policy networks for, for example, financial-economic policy or health policy; they provide evidence-informed intelligence, i.e. information derived from available and usable sound science (De Vries, 2008; Van Egmond, 2010; Halffman, 2009: 60; Den Butter, 2011).

*Policy advice*: in this type of discourse advisors inside bureaucracies claim to span the boundary between policy analysts and ministers and top-level civil servants; they 'advise the prince(s)' about acceptability and feasibility of policy proposals, incorporating (if possible) usable, best available knowledge on 'what works'.

*Post-normal science advice*: this is a discourse by expert advisors working on sustainability issues, inspired by 'post-normal science' and 'extended peer review' as advocated by Funtowicz and Ravetz (1992), and observed in practice by Hisschemöller et al (2001) and many others (e.g. Van der Sluijs et al., 2011); Turnpenny et al., 2012); they see issues of sustainability beset by so many uncertainties and value conflicts that 'normal' expert advice is obsolete; they wish to create and institutionalize more stable role and interaction patterns, so that experts and policymakers may engage in (more) productive, open dialogue, and integrated assessment of all (dis)advantages surrounding policy issues.

*Deliberative-procedural advice*: this discourse is found in advisory bodies with civil servants as permanent secretaries, knowledge auditors checking ethical codes of conduct for expert advisers or designing hybrid forums for 'wicked' policy problems, but also some consultants (Merkx, 2008; Aarden, 2009; Bijker et al., 2009; Grijzen, 2010; De Wit, 2011; Hoppe, 2010, pp. 146-150); they cherish and foster high-quality policy deliberation, which requires a clear and transparent procedure, and a set of process-criteria which allows robust but trusting parties, dissidents included, to fully and openly debate policy proposals and their concomitant uncertainties and normative struggles, each from their own perspective on the common good<sup>4</sup>.

## Types of problems, types of expert advice

The variety found may be linked to the different types of problems a political and administrative system has to deal with: domesticated or structured problems versus 'wicked'

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<sup>4</sup> Post-normal science and deliberative-procedural discourses show quite some overlap in practice (see also Loeber, 2010, Metzke, 2010, Sterrenberg, 2010).

or unstructured problems, and their in-between types (see also WRR, 2006). Researchers routinely distinguish between technical or specialist, strategic, and ad-hoc or temporary advisory bodies. These types by and large fit the problem type they normally deal with.

First, consider specialist and strongly technical advisory organizations that deliver instrumental, detailed, ready-for-implementation advice on largely domesticated problems like the Royal Dutch Meteorological Institute for weather forecasts and the hard-scientific aspects of climate change; or the 1965 established Technical Advisory Commission for Dykes - Technische Adviescommissie voor de Waterkeringen - TAW – continued after 2005 as Expertise Network for Water Safety – Expertise Netwerk voor Waterveiligheid - ENW. Politicians and other government policymakers generally prefer usable or directly instrumental advice. Because political multitasking environments easily generate cognitive overload, and political support building needs unequivocal messages, they put a premium on simplification; and it is easy for them to delegate or outsource technical problem-solving to (quasi)autonomous agencies staffed by certified experts. Yet, instrumental advice and delegated technocracy as problem-processing arrangement *only* work well for domesticated problems.

In addition, there are clearly specialist advisory bodies and knowledge institutes of broader scope and a non-technical nature – like the three planning bureaus (CPB, PLB, and SCP), or the Justice Department’s Research and Documentation Center (Wetenschappelijk Onderzoek- en Documentatie Centrum, WODC), or the Health Council (Gezondheidsraad, Gr). Their main business is to keep track of, and occasionally produce, sound science, develop future scenarios, and to advise on appropriate, effective and efficient means for consensual goals. They are frequently able to also deliver instrumental, usable advice. In the Netherlands, the political consensus on goals is usually documented in considerable detail in a coalition agreement formally adopted in parliament by the political parties constituting the government. Hence, such instrumental policy advice is welcome during the larger part of a short two to three years term of government.<sup>5</sup>

It appears that the larger part of experts in advisory functions operate like *policy analysts, knowledge brokers, or (in-house) policy advisors*. They work the borderline between science and politics dealing with domesticated problems, or problems concerning appropriate policy instruments, or their zone of overlap. The Dutch planning bureaus (see next section) and civil servants heading the ‘knowledge chambers’ in Dutch national departments frequently represent this type of expertise.

Next, consider strategic advisory institutes like the Scientific Council for Government Policy (WRR) as best example.<sup>6</sup> This council deals with as yet undomesticated problems; and politically sensitive issues characterized by potentially divisive ethical dilemmas. Examples are what to do with increasing amounts of labor migration to the Netherlands in the 1970s and later (Scholten, 2008, and Van Beek, 2010); or, in the late 1970s already, how to deal with environmental risk issues in economic policy making (Hoppe, 1983). The WRR’s advice is usually conceptual and not immediately translatable in policy design, adoption or implementation. Rather, such advice has the character of future studies and scenarios, meta-policy arguments about major policy guidelines, and long-term policy. Or the council devises new policy paradigms and policy discourses in which protagonists and antagonists in ethically divisive issues may find opportunities for reconciliation, if only on a procedural or temporary basis.

In these strategic advisory institutes, naturally, one finds relatively more *rational facilitators* and *mega-policy strategists*. Compared to instrumental, short-term advice,

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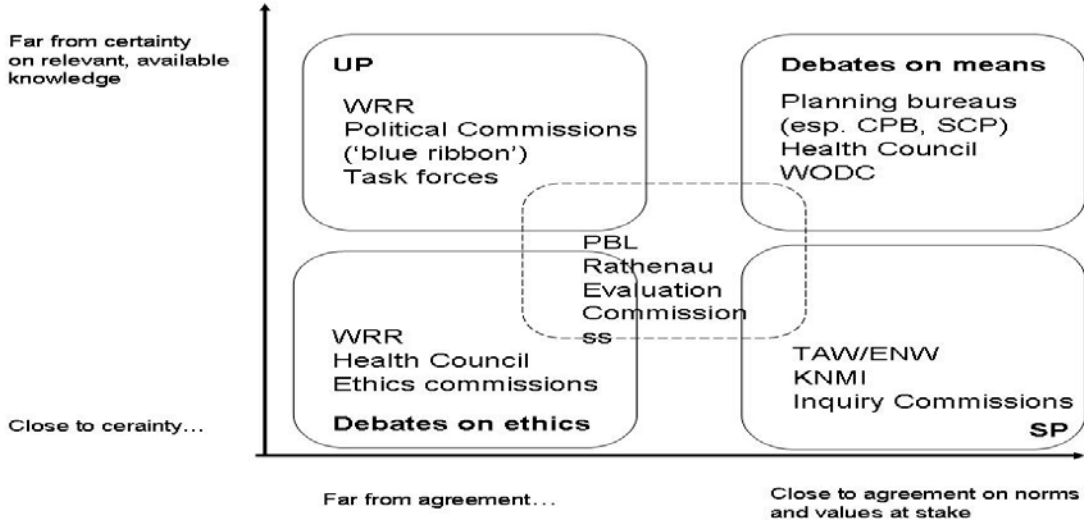
<sup>5</sup> [http://www.montesquieu-instituut.nl/id/vizrgik4a8ww/zittingsduur\\_kabinetten](http://www.montesquieu-instituut.nl/id/vizrgik4a8ww/zittingsduur_kabinetten)

<sup>6</sup> The eight so-called scientific bureaus or rather, *political think tanks*, of political parties also count as strategic advisory organizations. However, the little evidence that exists about them is just anecdotal.

strategic advice for the mid- and long-term has a much narrower policy window. *Timing* advice well is both more important and more difficult. Just before, during and perhaps still in the first year after a change of government appear to be relatively propitious times. But often short-term political developments outpace strategic advice. A 2001 WRR study was an intellectually courageous attempt to redefine the policy paradigm for immigration and integration policy along transnational political trends and economic globalization. Yet, published and presented briefly after 9/11, the advice had become profoundly unwelcome in a political climate converting overnight to nationalistic assimilation (Scholten, 2008).

*Post-normalists* and *deliberative proceduralists* are forced to operate across the borderline between domesticated and wicked problems. For example, an expert advisor working for the Rathenau Institute is supposed to inform parliament, but indirectly departments and important stakeholders as well, on the newest technological developments and innovations and their ethical, legal and social consequences (Van Est et al., 2002; Van Est and Brom, 2012). Expert advisors in the Health Council, too, will be confronted by complex medical-technological issues with ethically unknown or divisive implications (Bijker et al., 2009). Hence, trained as medical specialists they also need the skills to advice in debates on ethical acceptability and goal-appropriateness of medical-technological innovation (Hoppe, 2008). The same goes for the advisors in ethical commissions for scientific research or in hospitals. Finally, in sustainability-related issues, PBL advisors also need the skills to operate on all problem types. Because sustainability issues are far less stabilized in their division of labor between experts and policymakers, PBL-advisors frequently are post-normalist or deliberative proceduralists (e.g. Hajer, 2013).

Concluding and summarizing this section, the links between types of policy advisory bodies as more or less stabilized sets of boundary work discourses, rules and habits, and policy problem types may approximately be conceptualized as in Figure 3.



**Figure 3. Problem types and some exemplary advisory bodies in the Netherlands.**



## Political cultures and policy styles in the Dutch advisory infrastructure.

### Policy styles and public epistemologies

At the policy-political level boundary arrangements for expert policy advice cluster around specific (clusters of) policy problems and their typical issue or policy networks. These problem-and-network structures (Hoppe, 2010) in turn are embedded in a political-cultural sphere (see Figure 2) (Halffman, 2005; Jasanoff, 2005; Lentsch & Weingart, 2009; Engels, 2006). From a political and policy science perspective, one may speak about *policy styles*. (Richardson, (1982). Based on a snapshot in the 1980s, the Dutch style is still frequently assessed as reactive-consensual, accommodating policy conflicts through lengthy negotiations, but leading to a complex and strong set of policy sectors each with their own specialized governance networks (Van Putten, 1982; Skelcher et al., 2006). Using an STS perspective and focusing on regulatory policy, authors like Renn (1995) and Halffman (2003; 2005) have enriched this view with the idea of *regulatory regimes* (Halffman, 2003:360) or, in Jasanoff's terminology (2005) '*civic epistemologies*', i.e. the cultural and organizational practices by which politically relevant knowledge is selected, filtered, deliberated, validated or challenged (Lentsch and Weingart, 2009: 7). They 'intertextually' permeate and penetrate science-policy interactions at all other levels: they are the 'grand narratives' on which types of knowledge and modes of expertise and advice-giving to prefer in science-informed public policymaking. Based on previous research (Halffman & Hoppe, 2005), three such 'grand narratives' of advice giving as boundary work are posited for the Netherlands: neo-corporatism, neo-liberalism, and a deliberative turn.

### Fluctuating neo-corporatism (1123 words)

In neo-corporatist arrangements, a restricted set of a policy sector's main actors or stakeholders are formally accredited to enter the arena for policymaking. Neo-corporatism always been present in the Netherlands, mostly in socio-economic policymaking. In neo-corporatist policy networks, institutionalized expertise takes one of two forms. First, formally accredited stakeholder representatives mobilize their own expertise. In more technical negotiations, for example on health insurance schemes, experts like university professors may even represent patients. This pattern dominated the old system of national advisory councils. In the second form, experts delineate the playing field for stakeholder negotiations. They waive a flag whenever the negotiation game exceeds known budgetary constraints, or when, say, projections of next year's economic growth become unrealistically high. This second pattern is to be found most prominently in the planning bureaus.

As mentioned above, the neo-corporatist tradition of ruling by consensus among an elite of relevant stakeholders – the model of recognized employer organizations and labor unions expanded to other sectors of the society – led to an unchecked growth of the number of such councils. In the 1970s and 80s numerous reports advocated a reduction in their number (over 400 in 1976) and the creation of some order. Meanwhile, the nature of expertise in the councils professionalized, in the sense that representation of interests gradually shifted to interest-cum-knowledge representation (WRR, 1977; Oldersma, 2002). In 1997 the Ministry of the Interior both initiated the new framework law for advisory bodies, and abolished nearly all of the existing ones. The Socio-Economic Council excepted – as backbone of the neo-corporatist regime in socio-economic policy – all advisory councils were now considered expert councils. Also, councils were to become more generalist, covering more than one

policy field. However, in practice the logic of separate government departments proved stronger than the logic of legal reorganization (Klink, 2000). In 2009 there followed a second round of shrinking expert policy advice. Top-level civil servants and ministers desired to get rid of too much unsolicited, strategic advice emerging from the (modest) scope of advisory councils to set their own agendas (Hoppe, 2007). They successfully used the logic of performance measurement into a tool for eliminating some more advisory bodies (e.g. the Council for Spatial and Nature Research, RMNO) and disciplining the remaining advisory councils and planning bureaus to deliver more actionable and instrumental advice. This time even one planning bureau, the National Bureau for Spatial Research (RPB), was eliminated and amalgamated with the Environment and Nature Planning Bureau (PBL).

This brings us to the second mode of institutionalized expertise under neo-corporatism, the planning bureaus (see also Halffman, 2009). Different from suspicions raised by their being called ‘planning’ bureaus, these advisory bodies and knowledge institutes provide government departments with assessments of states of affairs and of future developments in their policy sectors and relate these to policy options. Although each of the three presently functioning planning bureaus (CPB, SCP, PBL) are formally agencies answering to departments whose ministers bear political responsibility for their finances and research agenda, through skilful performance of independence and political neutrality and fairness “they can provide policy makers with knowledge which is considered reliable and neutral to an extraordinary degree.” (Halffman, 2009: 41).

The central mission of the CPB is to discipline politics in terms of budgetary constraints and sound economic science. Here, independence clearly has its limits. The CPB, the oldest, most prestigious one, has close relationships with civil servants of the ministries of Economic Affairs and Financial Affairs, often with shared training in economics, econometrics, or accountancy, and career patterns that switch between the department and planning bureau” (Halffman, 2009:48). The other planning bureaus were actually modelled after the CPB, as other departments mobilized their own knowledge and expertise. The environmental planning bureau, with experts from many more different disciplines, is also engaged in quantitative monitoring of policy instruments and impacts, and modelling the relationship between them. But it has as a mission to monitor and remind the government of its commitments and promises in environmental policy. Where the CPB is willing to negotiate unexpected developments and resulting policy uncertainties with civil servants, and will never question intended government policy, the MNP experts insist on their scientific independence in defining uncertainties and are far less willing to uncritically accept government environmental policy (De Vries, 2008). The SCP is concerned with description and assessment of current conditions in society, and less with projections of trends and future developments. Like CPB, the SCP prefers numbers and calculations as input for its interpretative expertise about what is happening in Dutch society, and instrumental advice which follows dominant policy frames without questioning them (e.g. Schnabel, 2000; Scholten, 2008 ).<sup>7</sup>

In spite of their devotion to ‘serviceable truth’ (Jasanoff), the degree of acceptance by government and most policy actors of the planning bureaus’ assessments as for all practical purposes ‘uncontested’ is remarkable. Even political parties now routinely submit their election manifestoes to the CPB and PBL for a calculation (“doorrekenen”) and assessment of the likely outcomes. These are reported to the media and the voters as school report marks (Huitema, 2004). As such, planning bureaus occupy positions of obligatory passage points for Dutch politics that would be considered unacceptably technocratic in most other democratic countries.

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<sup>7</sup> As its director, Paul Schnabel, is considered one of the most politically effective advisors in the country, an alternative interpretation could be that SCP actually set government policy.

There appears to be a contradiction here. In spite of being *'on tap'* to policymakers in neo-corporatist governance, frequently it looks like the planning bureaus are *'on top'*: they rationalize political debate, enforce budgetary constraints (even on political parties before elections), and contribute to transparent accountability for the government's policy performance. They manage to do this because of a number of reasons. They are in a privileged position regarding access to (government) data and calculative resources (user-oriented modelling; e.g. Van Egmond and Zeiss, 2010; Petersen, 2006). They successfully exploit the image and rhetoric of numbers as objective and neutral. They not only discipline the policymakers, but are also mobilized by the policymakers themselves to discipline each other. Their most important political function may well be in creating a shared definition of reality without which accommodation of policy conflicts through negotiation would be near impossible (Halffman, 2009:54). In other words, the advisory councils and especially the planning bureaus are a bulwark against *'fact-free politics'*. Even unstructured problems are turned into structured or moderately structured problems with supposed value and goal consent.

Both in the advisory councils and through the planning bureaus the neo-corporatist logic of interest-cum-knowledge representation has changed into one of representation of the issues and the state of *'relevant'* knowledge. This does not mean that the barriers to policy access to just a handful of major policy players, typical for neo-corporatist politics, has disappeared. Rather, experts have been repositioned in such a way that the executive has stronger leverage to break through corporatist deadlocks (Hemerijck, 1994).

## Stable neo-liberalism and highly distributed expertise

The development of expertise as linesmen in neo-corporatist governance networks is only one trend. Other developments clearly show stable anchorage and embedding of a neo-liberal pattern. Typical for this pattern is a small state philosophy, doing more with less, leading to the externalization of in-house expertise out of government departments, and an emphasis on market coordination of expert resources. Here, two more indications for the stabilization of neo-liberal expert arrangements will be mentioned: the radical externalization of expertise at all ministries, and the contractualization and commodification of expert knowledge.

It is in the context of internal departmental organization of expertise and external relations with expert organizations that neo-liberal solutions are most manifest. After a decade of confusion on how to organize for *'knowledge intensive administration'*, or *'evidence-informed policy'*, all government departments have moved towards so-called *'knowledge chambers'*<sup>8</sup>, sometimes with coordinating *'scientific officers'* or *'chief scientists'*<sup>9</sup>. Typically, the function of knowledge chambers is formulated as a quasi-market, i.e. *'direct interaction between the supply and demand of knowledge'*. Demand is represented by top-level departmental bureaucrats; supply by the leadership of knowledge institutes. Usually annual consultations result in *'strategic knowledge agendas'* that define long- to mid-term policy and research themes.

The presumably improved connection between knowledge demand and supply would enable departments a larger and more complete overview of available expertise; and to draw on the just-right type of expertise per policy theme. In this way, departments are no longer the

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<sup>8</sup> Letter to the First Chamber by the coordinating minister of Education, Plasterk, 30 July 2008, Kennis/2008/5613.

<sup>9</sup> The difference is that *'scientific officers'* have unambiguous civil servant status and are supposed to be loyal to the departmental leadership, whereas *'chief scientists'* might turn out to be too independent and more loyal to *'science'*.

addressees of coherent expert advisory reports by councils. The externalization of expertise, in this way, contributes to more instrumental advice, to be selected by departmental civil servants, in spite of the longer- and mid-term view of policy and research themes in the no longer independently drawn up strategic policy agenda. Yet, the knowledge centers and chambers present an image of a larger distance between science and politics to the outside world, and this may create a resource for building legitimacy, claiming ‘independence’ of expert advice. But it also creates a gap between immediate policy needs and the agenda of professional researchers. This induces complex and increasingly formalized negotiations over mutual relations and degrees of control over research agendas (e.g. Van Hoesel and De Koning, 2005: 122-125).

Another form of externalization is the increased use of outside consultants, usually organized in a small number of large (> 100 employees) commercial research and consultancy organizations like McKinsey, Berenschot, Ecorys, or KPMG, and several dozens of medium (>10 <100) and small (<10) policy consultancies, some of which are semi-university and subsidized knowledge institutes (e.g. Kohnstamm Institute for research and advice on education). In 2005, from an estimated EUR 2 billion spent by national government<sup>10</sup> on advisory reports of outside consultants, EUR 300-400 million is estimated to be used for ‘policy support’ (Van Hoesel and De Koning, 2005: 121). In this market for policy advice, academic consultancy is far less successful than commercial consultancy. Departmental civil servants just favour the authority of established planning bureaus and the convenience of a consultant. Policymakers see academic consultants as unpredictable, over-principled and theoretical, and unwilling to stick to the policy problem as defined by the policymakers. As fact-finders and assessors consultants provide more comfortable avenues to knowledge and expertise.

Bouwmeester (2010) explains this by different advisory epistemologies of academic experts (trained policy analysts focusing on descriptive and causal analysis in line with mainstream scientific methods of economics and the other social sciences) and consultants (knowledge brokers and other types of boundary workers, relying on rhetorical advice on narrated practice, norms and values, in line with constructivist methods). From an academic perspective, the departmental commissioners of research try to get a grip on contracted research that stifles academic freedom and creativity (Köbben & Tromp, 1999; Köbben, n.d.). On top of that, by hiring external expert consultants, government, in line with neo-liberal reforms of government itself, has willingly over-exposed itself to a business-inspired paradigm like New Public Management (Wilks, 2013). Grijzen (2010) empirically studied the role of commercial consultants in regional spatial planning. She observes that too many external consultants as stand-ins for regular civil service staff turn government into an empty shell. Whereas spatial planning issues get more and more complex and ‘wicked’ – more issues, more stakeholders, more uncertainties, more normative perspectives – *ad-hoc* use of outside consultants and robs government of necessary in-house expertise and breaks the long-term memory needed for continuity of planning processes.

If there is a general line in the development of how government departments mobilize expertise, it is contractualization. The control practices around commissioned research and expertise have formalized and legalized. Some departments have developed guidelines on how civil servants should set up commissioned research, often accompanied by sample contracts and detailed rules. Even the relations between departments and their ‘own’ research institutes has taken a contractual turn in which agreements are made on research programmes and ‘deliverables’, including how much research money such institutes are supposed to earn

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<sup>10</sup> In this chapter no attention is paid to policymaking and expert advice on regional, provincial, local and waterboard scales. This is not only for reasons of space, but also because there is hardly any systematic, objective knowledge available.

in the 'open market'. Internationalization of the market for expertise and increased competition of sources of expertise are likely to drive this development further. Contractualization allows government to set up advisory relations with a larger number of sources of expertise. Against these benefits there are hidden transaction costs that come in the shape of legal overhead, over-instrumentalized knowledge, and problematic accumulation of knowledge over time.

## Emerging and waxing deliberative patterns

In deliberative conceptions of democracy (e.g. Dryzek, 2010) public debate, argumentation and discourse are viewed as the crucial aspects of politics. Therefore, all those forms of organizing the science/policy boundary will be called 'deliberative' that position expertise as really public, wherever it occurs – in parliament, in political parties, in sectoral councils or hybrid forums, the media, or non-governmental or civil-society associations and organizations. The pattern is frequently connected to discourses of public participation in public policymaking, the importance of experiential, local knowledge, public accessibility of knowledge, and reflexive awareness of the possibilities and limitations of expertise (Hajer and Wagenaar, 2003), in contrast with the restricted possibilities for political participation in neo-corporatist governance and strictly representative democracy. The pattern shows up most in the advisory functions of the Scientific Council for Government Policy (WRR), the Rathenau Institute, the improved self-reflexiveness of many knowledge institutes, and some of the knowledge centers.

Opposing or alternative points of view were taken into account to a certain extent in the neo-corporatist advisory philosophy. However, the reassembling of the social categories and groupings in post-modern society (Latour, 2005) and the typical new issues of the risk society (Beck, 1986) create new political collectives or stakeholder groupings for which neo-corporatist models are too rigid. A key actor behind new ways of handling expert knowledge in controversial issues that defied traditional policymaking, was the Rathenau Institute. In its attempts to develop beyond the limits and methodological difficulties of a type of technology assessment which uncovered and predicted societal 'impact' of new technologies, the Rathenau Institute started experimenting with new ways of creating debate between experts, citizens, stakeholders and policymakers. It adapted elements of the Danish consensus conferences or American citizen juries to Dutch politics and policymaking, but also stimulated the innovation of interactive (Grin et al., 1997) and constructive technology assessment (Rip, 2008). The methodology developed by the Rathenau Institute, clearly inspired by key notions in post-normal science and deliberative-proceduralism, is slowly finding its way to other organizations, for example in transition management for sustainable technology (Rotmans, 2003).

Another manifestation of the deliberative turn in science-informed policy advice is the gradual shift in the operation of the Scientific Council of Government Policy (WRR). Established in the 1970s from a rather technocratic ambition, it was to inform the government, especially the Prime Minister and his department of General Affairs, about major long-term policy, with a view to establish clear policy priorities and coherence. Hence, it paid a lot of attention to planning theory and future studies. In due course, the core functions of the WRR became *reflection* (agendasetting and the reframing of policy problems and paradigms), *research* (judging governmental megapolicy against the latest sound science, and policy-oriented scenarios) and *communication* (between government, academic research and foresight studies). Most important, however, is that the WRR gradually shifted from a technocratic advisory organization to a government think tank with as a mission to foster

public and political deliberation both inside and outside government (Keizer and Den Hoed, 2009: 74

Yet another interesting example of the deliberative pattern of organizing expertise is the emergence, since about 1998, of numerous 'knowledge centers'. Although quite a few research institutes have just seized the buzzword, knowledge centers aspire to be qualitatively different. They claim to make knowledge more available for policy use, either simply through accumulation of knowledge, or by performing the role of a knowledge broker. Knowledge centers want to be facilitators of a collective and public learning process, targeted at practitioners in general, rather than governmental policymakers in particular (Beemer and Den Boer, 2003). Their organizational format ranges from a mere web portal, run by a handful of volunteers, to the research facilities of a complete university like Wageningen Research Center. Around 2002 there were around 115 knowledge centers, mostly funded by public means (Ketting, 2002). Knowledge centers organize around policy domains or issues rather than by academic discipline or research field. For example, there are knowledge centers for sustainable building and construction, or urban policy. Their innovation in the governance of expertise is not so much improved knowledge transfer, but their post-academic and – professional positioning, outside of the strongholds of disciplines, universities and established knowledge institutes. This means that knowledge centers have an inter- and transdisciplinary make-up in line with externally extended peer review processes that include many types of stakeholders beyond academic peers, as advocated by postnormalist or deliberative-proceduralist epistemologies.

Evidently, this raises issues of quality control. Like many other countries, the Netherlands has an elaborate system of quality control for disciplinary research. Even research and knowledge institutes (like the planning bureaus) now have systems of internal and external quality assessment and control, the latter by means of peer review and visitation committees. However, no such more or less institutionalized assessment and control criteria exist for the social impact and inter- or transdisciplinary nature of research and expertise (De Wit, 2009, p. 148-149). Thus, knowledge centers may be useful for policymakers in breaking through the iron triangles of neo-corporatist governance and expert advice-giving. However, they also run the risk of becoming just a cheap but undercritical knowledge resource for policymakers (Beemer and Den Boer, 2003).

## **Changes in the problem and the polity, changes in science-informed policy advice**

Changes in the organization of policy expertise in the Netherlands over the last decades have been complex and have taken manifold shapes. New organizations, new formats, and new policy issues have emerged in new boundary arrangements for policy analysis, while older ones have not disappeared. Salient developments highlighted here were the restructuring and slimming of the advisory councils into a small set of expert councils; the gradual normalization of the planning bureau function ; the externalization and outsourcing to commercial consultants of in-house departmental expertise and its concomitant

contractualization and commodification ; and a slow deliberative turn manifest in some knowledge and expertise institutes, the enormous increase in knowledge centers, and increasing reflexivity of most expert organizations. All this begs the question: *how to make sense of these very different sorts of interactions, also over time?*

Some scholars homogenize an account of science/policy boundaries as matters of national regulatory or policymaking style. A second, more dynamic, yet also homogenizing conceptualization is the narrative of grand transitions. Notions like development from Mode 1 to Mode 2 science (Gibbons, 1994), from science speaking monologues to society to society speaking back (Nowotny et al., 2001) suggest such transitions. Such accounts have the ring of beauty of every dichotomous simplification. However, homogenizing accounts do not apply to the Netherlands. As overall conclusion, one could say that the development of Dutch society from corporatist pillarization towards a risk and knowledge society, and of Dutch politics from accommodation government to network governance, has, for the time being, resulted in a polity forced to deal with less structured and more ‘wicked’ types of policy problems. These changes in the polity and the substance of policy issues brought along changes in the knowledge-and-expertise infrastructure, in the sense of a broader spectrum of types of science/policy interfaces . At the level of boundary arrangements and organizations, traditional types of policy analysis and advice, knowledge brokerage and rational facilitation of accommodation were enriched by newer modalities: clearly articulated mega- and meta-policy strategizing, postnormal science expert practices, and deliberative-procedural types of policy-oriented and science-informed expertise. Thus, there was a shift to modes of advice-giving aligned with the shift from structured to less structured problems. To the extent good governance means that the polity should be able to deal with all types of policy problems (Hoppe, 2010), Dutch society and politics appear to have risen to the occasion.

However, at the level of political cultures favouring different policy styles and their concomitant modes of organizing expertise, this meant, not a homogenizing focus, but a broadening and opening-up of the system: from neo-corporatist hegemony to a system where it competes with strong neo-liberalist and emergent deliberative developments. This leads to new ways of integrating heterogeneous sources of expertise, under increased reflexive awareness of the possibilities and limitations of expert advice. For example, as one minor manifestation, it was mentioned that the planning bureaus have moved towards agency status, and are now subject to regular peer reviews. The gradual erosion of the old neo-corporatist advisory system (in which the CPB played a pivotal role) thus occurred simultaneous with the neo-liberal rejection of such arrangements (hence, the agency status) and quality control (as in both neo-liberal and deliberative cultures). In a small country like the Netherlands various patterns for organizing and justifying the science/policy boundary are now intertwining and competing with each other. The internationalization and globalization of science-informed expertise will only intensify this (Jungcurt, 2012). It will be interesting to study how the CPB develops now that expert advice of the OECD and the budget authorities of the EU also have become strong influences on Dutch budgetary policy decisions.

The cultures or policy styles were deliberately labelled with terms alluding to political connotations, because the ‘puzzling’ of expertise always happens in a broader landscape of political struggle or ‘powering’. Rather than a grand transition from one mode of public expertise to another, or out of one and towards a single alternative national or international or transnational policy style, there are multiple patterns in tension and competition with each other. The patterns conflict and vie for dominance, argue against each other, and hence partly develop according to their inherent logic but also in response to each other. The competition between these patterns is more than just a matter of “what form of expert policy advice works best” On the contrary, the debate over how to organize expertise and policy advice often carries *ideological overtones*. What is at stake is exactly how “what works best” should be

understood and defined. It clearly shows how much policy analytic expertise has become embedded in politics.



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