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Strategic spatial planning through pragmatic blueprints: Forms and levels of adaptivity in modernist planning of the Dutch *IJsselmeerpolders*

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ABSTRACT

Strategic spatial planning is a governance practice pursuing coordinated improvement of mobility, housing, food production and other functions with a spatial impact. The institutions in this practice marry long-term thinking in the light of societal challenges with strategic action. These activities are intertwined, visionary and pragmatic at the same time.

The currently prevalent association within strategic planning of long-term political determination with rigid, top-down blueprints has prompted reduced national and regional planning efforts in the Netherlands and other European countries. Adaptivity and resilience within planning processes are promoted as novel and more suitable ways of steering spatial conditions within societies today. Adaptive is defined as 'being open for reconsideration'. Choices that were considered good yesterday, may need to be reconsidered tomorrow.

The notion of adaptivity in planning, and the desirability of it, needs more nuance. Because, (1) Do changing long-term perspectives imply a need for adaptivity in the strategies used? (2) To which precise aspects of deliberate strategies can adaptivity apply? (3) Does the pursuit of adaptivity require a new planning approach, as is often claimed?

We applied these questions within a critical case study: the creation of the Dutch IJsselmeerpolders, prototypes of rigid rather than adaptive planning, a strategy pursued for over 50 years. Despite radically shifting long-term perspectives, the governance practice of plan-making appears to have been capable of serving evolving purposes. Within this masterplanned mega-project we identify five forms of adaptivity associated with different geographical and time scales.

We conclude that an enduring strategic governance effort can support shifting long-term perspectives when it is applied pragmatically with regard to selected topics. Rigidity and adaptivity are equally indispensable and inevitable for strategic action.

1. Introduction

Strategic spatial planning is a governance practice that facilitates decision making within a society aimed at improving infrastructure, housing, water management, food production, and other spatially relevant functions in a coordinated way. It produces plans and policies at many scales simultaneously and entails establishing and developing strategies set within a long-term perspective. It is a particular intersectoral domain of governance that demonstrates the features of the framing paper to this Special Issue. As [Albrechts \(2006, p.1491\)](#) stated:

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Strategic spatial planning is a transformative and integrative, (preferably) public sector led (Kunzmann, 2000) socio-spatial (see Healey, 1997, for the emphasis on the social) process through which a vision, coherent actions and means for implementation are produced that shape and frame what a place is and might become.

Constant reformulations of a long-term perspective for steering the developmental direction of a city, region, or country leads to the proliferation of a myriad of strategies that “guide and give justification for interventions in urban development investment, area management and development regulation” (Healey, 2007, p.172). Successful strategies are generative of frames, discourses and ultimately institutions (Healey, p.184). Thus, a dynamic process unfolds, feeding back into the long-term perspectives along with contextual changes. The perspectives that foster and are fostered by these strategies are qualitative, political, and cultural. They are elusive, sketched out in broad strokes, and consequential only when they motivate strategic actions.

Strategic planning operationalizes perspectives into decision making for a world that however is fraught with uncertainty, as demonstrated within various disciplines since the 1950s (Friend & Hickling, 2005; Simon, 1959, 1965, 1979). Uncertainty characterizes not only all of the elements within the interconnected web of dynamic perspectives, visions, and plans that is constitutive of strategic planning but also the external context, which develops in unpredictable ways. This phenomenon is referred to as “deep uncertainty” within the literature, giving rise to the assumption that any deliberate spatial strategy is likely to fail.

Consequently, a short-term, bottom-up, adaptive planning approach has been foregrounded within the spatial planning literature and in practice in recent decades. ‘Adaptation’ means reconsideration of initial choices. The attention for adaptivity reflects a hesitation to engage in a more integral, deliberate, and coherent process of steering ambitions. Because of the emphasis on adaptivity and bottom-up planning, governance arrangements that were traditionally characterized by long-term planning, notably regional and national planning, have eroded. Many Western governments that were traditionally adept at regional planning now espouse neoliberal principles, shying away from leadership on long-term issues. In her study of regional design Balz (2019) points to an institutional void, arguing that there is a dire need for thorough regional analyses, stories that mobilize, and governance arrangements that deliver desired change. Adaptation seems to have replaced control, ambition and determination.

The value of incorporating adaptivity within spatial strategies has been widely emphasized. However, here we argue that a deeper, more critical exploration of this concept is required. Planning is never completely a blueprint or fully adaptive. Relations among multiple existing approaches are much more complex, and adaptivity can be embedded within robust strategies that serve long-term perspectives without losing their long-term transformative capacities. The following questions are addressed in this inquiry. (1) Do changing long-term perspectives imply a need for adaptivity? (2) When a deliberate strategy is being pursued, to which precise aspects does adaptivity apply? (3) To what extent does the pursuit of adaptivity require a new planning approach? These questions are addressed in this paper.

Rather than viewing adaptivity and rigidity as opposed concepts, acknowledging their duality is pertinent, given acute awareness of global threats and the inability to counter them within contemporary societies. Concerns about climate change, migration, energy transition, sustainable food production, water resource management, and the livability of cities feature prominently within societal debates. However, the policies formulated in response to these concerns are limited because comprehensive stories and policies are viewed as being too rigid and top-down.

Balz (2019) has demonstrated this conceptual duality. A regional spatial plan, which is a key outcome of strategic spatial planning, may resemble a blueprint, but in reality it invites what Balz refers to as “discretionary action”. Specifically, she states:

Discretionary action is strongly influenced by the room for interpretation that premediated rules involve: their flexibility determines if such action likely evolves as a refinement of rules or as a challenge to them. Likewise, (...) ambiguity determines if practices seek to detail concepts in the light of particular spatial circumstances or seek to expand them by uncovering new aspects of the environment. (Balz, 2019, p.38)

Similarly, Mäntyselä, Kangasoja, and Kanninen (2015) stressed the duality of strategic and statutory planning. Indeed, plans when used strategically can serve as a process of sense-making, persuading and framing actions without attempting to determine them fully (Dühr, 2006; Hopkins & Knaap, 2018; Neuman, 2010; Rein & Schon, 1993; Zonneveld, 2008). Balz’s concept of “indicative planning” (Balz, 2019, p. 133) signals the presence of a strong long-term story with operational implications that is promoted at ministerial or regional levels yet in terms of practical consequences is pragmatically applied.

Through our critical case study of the Dutch IJsselmeerpolder project we aim to show that the allegedly exclusive and opposed concepts of adaptivity and strategic determination, of which the first extreme is often deemed more appropriate, are in fact simultaneously present and equally valuable. As a result of considering different forms of adaptivity, the ongoing debate on how key challenges of our times can be confronted may become more constructive.

In the next section, we briefly review the rise of uncertainty in planning theory and the emphasis on adaptiveness for its resolution. Section 3 presents a methodology for addressing the key research questions. This is followed by an analysis and discussion of our case study for further exploring the meaning of adaptiveness. In Section 4, we demonstrate how the *polder* plans serve as a simultaneously robust and pragmatic strategy that accommodates shifting long-term perspectives. Lastly, in Section 5, we reveal how the blueprints were pragmatically implemented.

2. The tension between determination and adaptivity

The 2013 special issue of *disP-The Planning Review* discussed in detail how strategic planning differs from traditional planning, which is aimed at control and regulation. Strategic planning, in contrast, combines “long-term visions or frames of reference and strategies on different levels (...) to enhance action orientation beyond the idea of planning as control (...) towards an expression of a

sense of direction” (Albrechts & Balducci, 2013 pp. 19, 24).

This process inevitably entails tension, paradoxes, and dilemmas: As Savini, Majoor, & Salet, 2015 (p. 310), ask, “what type and degree of control do spontaneous processes of urban development need?” There is a paradoxical and complex relation between long-term determination and short-term adaptiveness in any strategy formulation (Castaño, Hartmann, & Dewulf, 2017). The deeply embedded tension between control and laissez-faire has been addressed by scholars in many disciplines, using a variety of vocabularies. Many of these studies indicate the need to strike a balance between these two polarities. This tension is at the core of strategic spatial planning.

Attempts to devise strategies inevitably contend with both the impossibility and the necessity of predicting and controlling the future. The task of intervening has become increasingly daunting as a result of several developments, identified by Healey (2000). These developments include a growing disinterest in formal party politics and representative democracy among citizens; the small size of municipalities, constraining significant interactions across urban areas; the increasing size and complexity of functional areas within urban regions; increased differentiation of actors; and devaluation of knowledge about “what is going on” that can point the way to “what could be.” Power and claims to truth have become increasingly fragmented.

Over the last decade, the plea for moderating control has attracted attention within the planning literature. The focus on uncertainty has increased (Boelens & de Roo, 2016), sometimes prompting advocacy of “planning without plans” (Friedman, 2004, Boelens, 2006; Alexander, Mazza, & Moroni, 2012; Boelens, 2006; Boelens & De Roo, 2016; Friedman, 2004). Planning is no longer about knowing and controlling; it is about sense making and navigation (Hillier, 2011).

The master plan, or blueprint has gradually begun to embody an approach that is to be avoided, namely a long-term perspective, which has been vilified for being procedural, prescriptive, linear, static, rigid, unstrategic, unresponsive to new information, ignorant of individuals’ preferences and coldly authoritarian (De Roo & Hillier, 2016; Janssen-Jansen, 2016; Rauws & De Roo, 2016; Sharifi & Yamagata, 2018; Tasan-Kok et al., 2016). The blueprint concept as well as, on occasion, plan-making in general, is commonly referred to in a disparaging way, implying that retaining a firm idea on where to take a region or a city would be universally wrong.

The main alternative proposed for addressing these problems within the literature are to increase adaptiveness (De Roo & Silva, 2010; Haasnoot, Kwakkel, Walker, & Maat, 2013; Restemeyer et al., 2017), flexibility (Tempels & Hartmann, 2014), resilience (de Bruijn, 2005; Needham & Hartmann, 2012) and bottom-up short-term planning cycles. A better balance between robustness and flexibility has to be achieved (Hartmann & Driessen, 2017; van Buuren et al., 2013). Especially within the water management literature, this call for strategic flexibility is strong. The fluidity of adaptive planning is propagated by many as a much better alternative, enabling contextual changes to be addressed.

Adaptivity entails acknowledgment of continuous changes in circumstances that are subject to controlling efforts, in this case, land use. The tangible meaning of adaptivity in practice remains to be defined. A particularly urgent question that needs to be addressed is *what specific aspects* should be flexible and coordinated differently than present planning practices? This question keeps us from sliding into the pitfall that Savini et al. (2015, p. 310) warn against in their essay on the dilemma of control or self-organization: “Any radical solution towards one of the extremes [full rigidity or full adaptivity] would amputate planning of one of its major capacities, either that of controlling potentially disruptive events or to endow virtuous change.” De Roo (2012) pointed to the simultaneous existence of what he termed robustness and flexibility. Some aspects may require more rigid planning.

Where adaptivity, which is one of the many components of a planning process, is needed, should be specified, and its tangible achievements should be scientifically tested. The Casco concept, which prevailed in Dutch planning debates in the 1990s (Doevendans, Lörzing, & Schram, 2007; Sijmons, 1991; van der Vlist, 1991) gives us a hint of how to deal with the paradox. This concept projected a landscape comprising a low-dynamic mesh of main roads and nature reserves, within which agricultural and urban blocks with high-dynamic functions are located. Both elements have their own pace of dynamics and may also have their own levels of adaptiveness with regard to the planning approach. The main low dynamic “carrying structures” (Moroni, Rauws, & Cozzolino, 2019) are indispensable, as they enable the existence of highly dynamic agricultural, urban, and recreational functions. The low-dynamic structure is inherently relatively rigid, while the highly dynamic blocks benefit from flexible planning.

Clearly, in addressing the question of *what aspects* should be more flexible and what aspects should be more rigid, it is apparent that both qualities have their merits. Thus, the widely assumed either/or dichotomy is redundant. Slow, rigid planning and fast, adaptive planning both matter.

3. Methods

In this paper, we argue that further inquiry is required into what aspects in the chain extending from long-term perspectives to strategic planning projects to spatial interventions can and should be flexible. Next, we raise the question of whether the pursuit of adaptivity requires a new planning approach.

This is a critical position to adopt that we tested by seeking adaptivity in an unlikely setting: a major strategic planning program that exemplifies blueprint planning. The detection and categorization of examples of adaptiveness in such a program contributes evidence that complements that of existing studies relating to deliberately adaptive practices.

This study is not intended to set an example or reveal the determinants of success. It merely serves to point to forms of existing flexibility in the strategic pursuit of dynamic long-term perspectives. A well-documented project spanning a period entailing shifting long-term perspectives could serve this purpose.

We selected the creation of the Dutch IJsselmeerpolders as our case study (Fig. 1). With a life span extending from the 1930s to the 1980s, this project was conceived and developed during a period when the predominance of a positivistic world view and a strong welfare state conceivably gave rise to a particularly rigid approach. This project was exceptionally large and initiated for a distinctive

long-term perspective that evolved dramatically over time. At first glance, it appears to reflect a planning strategy that scores low in terms of the contemporary emphasis on adaptivity. However, despite a radically changing context, it endured.

During the project's implementation, the shallow bay northeast of Amsterdam was separated from the sea by a dam, and over a period of decades, an area of 2000 km² of land was reclaimed from the newly created lake. This achievement entailed the construction of dikes over distances of hundreds of kilometers to protect these lands positioned below sea level. Canals and pumping stations were built to ensure continual pumping out of rainwater and groundwater seepage. Moreover, it involved soil preparation, the construction

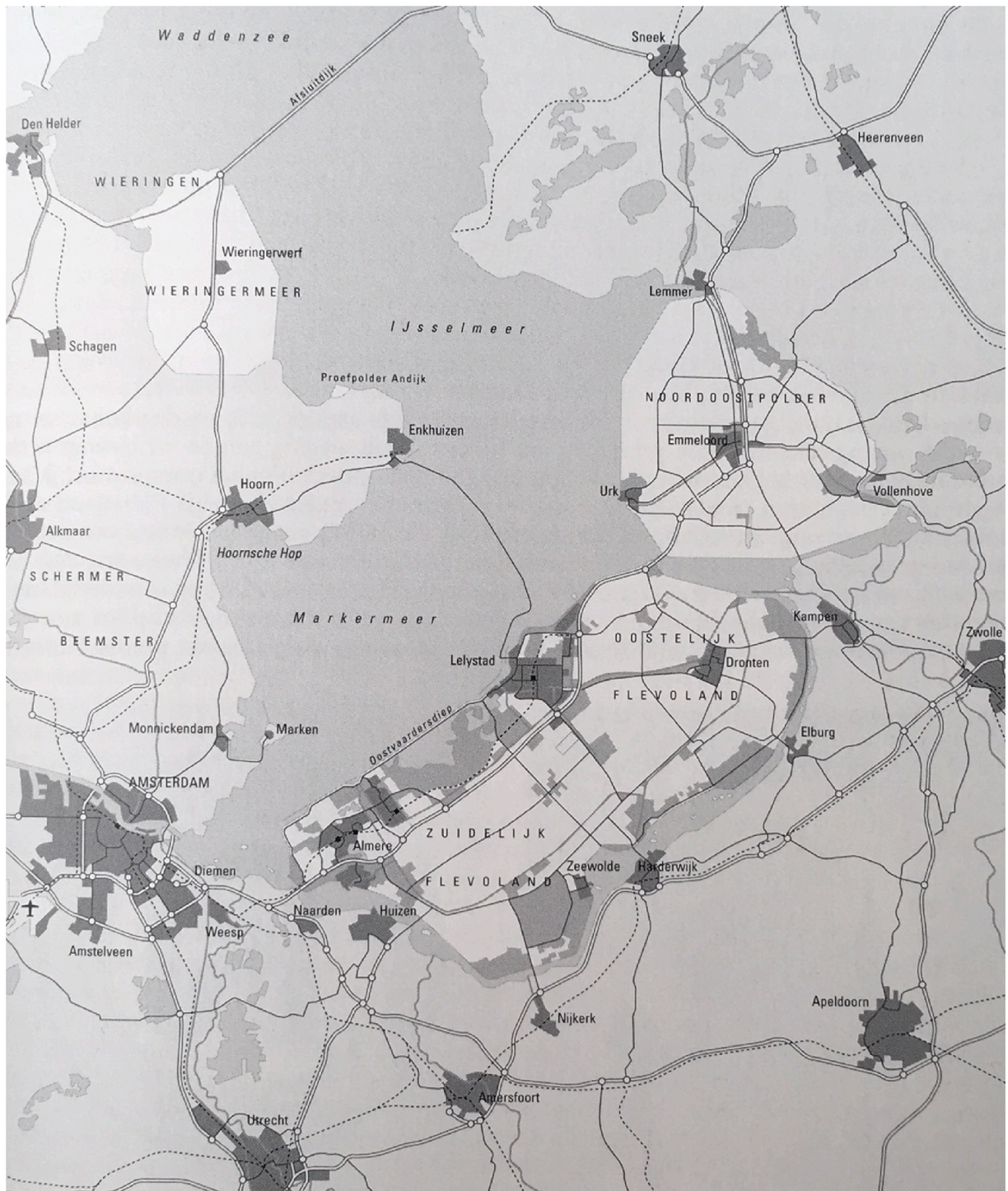


Fig. 1. Topographic map of the result today of a vision that was conceived just after 1900.

of a network of roads, farm buildings, and towns for the *polder* population to live in, meet, attend school, congregate in churches, and buy their groceries. It was a massive, state-financed undertaking, coordinated by two special-purpose agencies (Hulsten, 1969): Dienst Zuiderzeewerken (DZZ), responsible for the project’s design and engineering aspects and the Rijksdienst voor de IJsselmeerpolders (RIJP), which was in charge of soil preparation and managing the settlement of farmers.

This case study presents a peculiar situation: a lake with no vested on-land interests (apart from fisheries and its ecological values) became a virtual *tabula rasa* for planners. Investments were exclusively from the national government, with modernism being an influential paradigm at the time of the project’s conception. In this context, attempts to reveal flexibility, however unlikely, shed light on the forms it takes.

To address the research questions, we scanned key publications that describe in great detail how these *polders* were designed, built, and colonized for any references to adaptations in the plans. These publications include Geurts’ (1997) detailed elaboration of the design and implementation process. Geurts documented precisely who was involved in decision making, what criteria were applied and when, what decisions were made in what year, and how implementation deviated from the original design. His account revealed the dynamics in the design process and highlighted the pragmatic flexibility with which they plans were implemented. More recently, Horlings and Blom (2018) provided a similarly detailed description of the dynamic environment in which many decisions regarding the plans for planting and developing the road infrastructure were made. Hemel and O’Loughlin (1994) focused on the work of one designer in particular, C. van Eesteren, showing the extent of contemplation, discussion, and rejected drafts that preceded investments.

The adaptivity pointed out by these three key publications finds confirmation in the accounts published by Ministerie van Verkeer en Waterstaat (1996); Schimmel (1987); van Dijk (1979); van Lenthe (1988) and van Duin, de Kaste, and Nicolai (1984) that highlight smaller time frames or specific themes. The adaptations described in all these publications were categorized. This way, nuance was added to the notion of adaptiveness, based on five distinct interpretations.

4. Strategies and perspectives

Before pointing out categories of adaptivity within the *polder* projects, we relate the overall *polder*-making governance strategy to shifting long-term perspectives. Every plan-making process (establishing a course of deliberate actions) is about making sense of “what is” and what “will be” and attempting to steer “what will be” toward “what should be” (van Dijk, 2020). The “what should be” is the focus of the long-term perspective. Strategic governance is about “how to” get there. Both are about direction, but on different levels of time and detail.

Dynamics in the leading perspectives is visible in the area northeast of Amsterdam, which is at the heart of the Netherlands, a former bay connected to the North Sea that has been dammed, partially drained, and its water desalinated over several years. The subsequent drainage of the land reclamations (*polders*) in this former bay produced an entirely new landscape in which every element was fabricated. As in the case of new towns, the drawing table was the place where experts conceived, shared, and adjusted their ideas

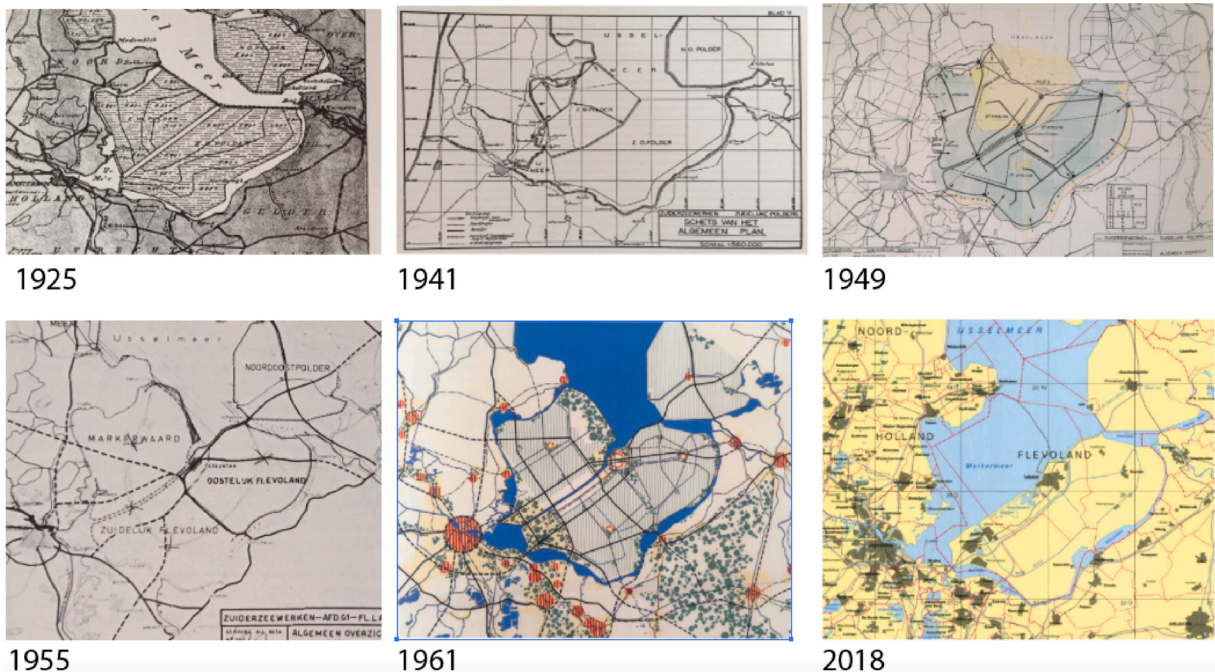


Fig. 2. Evolution in the official blueprints. Over time, the basic outline stayed the same but important adjustments to the shape of fringe lakes and location of settlements were made.

on how best to create this landscape.

As Meyer (2016, pp. 95–122) has shown, the main driver of the projects was a long-term perspective that evolved over time. First, the national government took the initiative for the purpose of managing water resources. The aim was to make the Zuiderzee coastline less prone to flooding by closing off the bay with a dam. This technique of shortening the coastline was subsequently also applied in the Zeeland Delta in the southwestern part of the country. This project also entailed desalinating the newly created lake, which served as a reservoir for surrounding agricultural areas. The work of desalinization and protection against the tide facilitated a further choice: draining parts of the lake.

The first long-term perspective guiding the actual drainage and subsequent land use emerged as a result of a consequential shift. From the 1930s to the 1950s, maintaining the national food supply was the primary objective, as the two world wars had revealed that the Netherlands was unable to feed itself. Therefore, reclaiming fertile clay soils from the sea was considered an urgent priority. First and foremost, the *polders* had to serve as the heartland of optimal agricultural production. Initially, all other considerations were subservient to this effort (Geurts, 1997). The creation of the *polders* was the strategy devised for achieving this perspective on what a resilient country would need. Their design centered on facilitating good drainage and achieving optimal parcel sizes and settlements that would serve the agricultural community. They even became a source of national pride and identity: the motto “dredge, drain and reclaim” (Meyer, 2016, p.110 citing van Veen, 1948) was institutionalized within various doctrines and discourses.

After the goal of food security had been met and the Netherlands had emerged as a major exporting country by the end of the 1960s, the long-term perspective of food security changed to one that emphasized an agenda of issues of mobility, recreation, and suburbanization that had assumed center stage in the Spatial Planning Memorandums of 1966 (Second Memorandum) and 1973 (Third Memorandum). Consequently, the next design phase for *polders* incorporated the construction of more highways, bigger settlements with regional functions, and many hectares of forest, even on highly productive clay soils.

Strikingly, although the national long-term perspective on what most urgent needs had to be addressed shifted considerably, the *polder* implementation strategy basically stayed the same (Fig. 2). A number of strategic plans were developed for every *polder*:

- The parcelling plan (*Verkavelingsplan*) stipulated where canals would be dug (adhering to soil and elevation conditions), and accordingly, what parcels would be created and where roads would be built and connected to existing infrastructure surrounding the *polders*.
- The settlement plan (*Dorpenplan*) stipulated where people would live.
- The planting plan (*Beplantingsplan*) stipulated where forests would be planted and how lanes of bigger trees would structure the flat and open *polder* land into compartments that would be more pleasant to live in.

The governance configuration of discussion, design, decision making, and implementation of tentative plans remained the same but was applied in service of different ambitions over time. The considerations informing choices within the plans shifted in the long-term planning process, but the implementation strategy stayed the same. Over the same time period, the current comprehensive planning system in the Netherlands (Nordic tradition; see Nadin & Stead, 2008) and the welfare state were established. This perspectival transformation for directing spatial change did not cause this governance strategy to be abandoned.

This discussion reveals that one strategy of building dikes, draining land, centrally installing basic infrastructure, and transferring parcels of land to citizens, businesses, and semi-governments, can be kept constant whilst serving changing perspectives. Claims to space changed, but the production of space itself remained. Thus, new long-term perspectives can re-use old strategies. This mechanism is also apparent in Meyer's (2016, pp.106-137) account of the Deltaplan.

New perspectives entailed the use of familiar strategies that appeared to be flexible in the sense of serving different agendas and policy domains.

5. Forms of adaptivity in modernist blueprint planning

While the former section shows that changing long-term perspectives may be supported by the same governance strategies, this Section address project-level adaptivity and in particular the unhelpful vilification and dismissal of blueprints and plans-as-maps as being incompatible with adaptiveness. The suggestion that more adaptivity is, by definition, better, and that a blueprint is a hindrance is unproductive for tackling future spatial challenges. Our critical case portrays in more detail what the simultaneous existence of rigidity and flexibility looks like in practice by scrutinizing the alleged over-robustness of blueprint planning. The IJsselmeerpolders project advances understanding of the duality of blueprints and adaptivity. They hinge on what is rigid for whom, at what scale in place and time, and the adaptive worlds that rigidly defined frameworks make possible.

In light of our review of the three selected key publications on the design and creation of the *polders*, we present five aspects of the planning of a place that turned out to be more or less flexible, thus belying the widely held assumptions described below:

- (A) The blueprint, being centrally prescribed by one dominant actor, obeys this one rationality (frame rigidity).
- (B) The blueprint imposes a predefined pace and sequence (process rigidity).
- (C) The blueprint specifies each and every detail of what will be created (encompassing definitiveness).
- (D) Once finalized, the plan is implemented at all costs even when new insights arise (implementation rigidity).
- (E) The material result can only be used for the purpose intended by the blueprint (output rigidity).

As we will show, both a leading overall concept *and* adaptation with respect to process, content, and output occur in conjunction.

We observed these five forms of flexibility at various scales. The process of installing the most essential elements of the *polders*, such as dike rings, was implemented at the macroscale. Reconsiderations at this scale related to timing, location, and shape. The mesoscale choices concerned the parcels, roads, forests, and settlements in the *polders*. Micro-level choices in the context of this analysis related to how the land would actually be used and what road profiles and farmyards would look like.

5.1. Adaptiveness in the macroscale choices relating to the IJsselmeerpolders

The macro-level choices concerned the dike rings that enclosed and defined the *polders*. Hundreds of kilometers of expensive dikes were built and blueprints guided the engineers in the field. Once decided, deviations for the blueprints would prove difficult.

Despite the massive investments and evident civil-engineering realities that were the main consideration in the project, its pace and sequence turned out to be adaptive in a number of respects. One central precept undergirded the entire *polder* project: create a number of dike rings in this shallow bay, drain the water and use the land thus created for food production. This fundamental choice has always taken the lead. The various maps drawn over time were indicative of what the rings and the land use within could look like. But the dynamics can be observed in the details (Fig. 2, Table 1). After many decades of proposing alternative shapes and locations for these *polders*, a choice emerged from this main concept just before execution.

Five *polders* were projected, a final drawing was made, and a decision was taken (in 1918), after which construction began. The first drawing had all the features of a blueprint. However, a drawing does not always imply that from that point on, no changes would be made.

As described by Geurts (1997), the project as a whole entailed a continuous cycle of meta-levels adaptations. For example, the original agreed sequence of construction of the *polders* changed because of unexpected circumstances (Table 2). According to the original plan, the (Wieringermeer) *polder* was constructed first. However, when the time came to build the second one in line, the southern-most *polder*, the advent of the economic crisis in the 1930s compelled the government to limit its investments and build a smaller *polder* instead. Therefore, although the Noordoostpolder was developed later than planned (it was drained in 1942), it was the second *polder* to be constructed instead of the last one (Geurts, 1997, p. 50). According to the initial planning, the southeastern *polder* should have been constructed next, but diverging from the plan, that project was subdivided into two phases. In 1950, the decision was taken to build the Oostelijk Flevoland *polder* first (Geurts, 1997, p. 94), but the pace of construction was slower than expected (it was drained in 1957) because the Delta works took up a large portion of government funds. Then the western *polder* (later named Markerwaard) was expected to be built next. Construction of its eastern dike was already underway in the 1950s (Geurts, 1997, p. 168). However, the large southern-most *polder* had more to offer in light of the unexpected expansion of the Randstad cities and required less dike length. Therefore, in 1960, it was decided that this *polder* would be built next (Geurts, 1997, p.168), demonstrating further deviation from the originally planned sequence. The prematurely built eastern Markerwaard dike was then repurposed to function as the western dike of Zuidelijk Flevoland, which explains the curve west of Lelystad. The construction of the western *polder*, later named Markerwaard, was postponed and ultimately cancelled. The initially anticipated counter clockwise sequence of construction in reality turned out to become clockwise (van Duin et al., 1984, p.64).

This brief outline reveals that in practice, even a long-term and seemingly rigid technical-rational macro plan was pragmatically reassessed at various points in its execution. However, for every component of which the construction started, builders had to be adhered to to most recent state of the debate. Although the macro-level blueprint contained a planned sequence of construction at the time of the decision made in 1918, its implementation appeared to be open for reassessment, indicating an adaptive process. Assumption (B) did not apply. Even the names for the subsequent *polders* were adjusted (see Table 2).

In addition to the sequence outlined in the macro-plan, the precise shapes of the dike rings were adjusted incrementally. Because subsequent adjustments of the shapes of the dikes would incur high costs, a considerable amount of time was invested in ensuring their exact placement. The fringe lakes to the east of the eastern *polder*, and especially the southern *polder*, were widened when water-based recreation became increasingly important. Subtle curves were added to make the experience of car drivers crossing the dikes more

Table 1
Macro-level adaptativity: Zuiderzee project Master planning of dikes and polders.

Before the project started	When starting NOP	When starting East Flevoland	When starting South Flevoland	Post-construction adaptations
Various designs were presented since 1880 for a system of dikes rings with minimum length generating maximum acreage of productive land	<i>design choice:</i> Horseshoe shaped dike beginning and ending against existing land mass <i>evaluation:</i> This design causes problematic groundwater flows from the existing land into the polder	<i>adapted design:</i> Circular free standing dike ring, set apart by a narrow fringe lake as a seepage blocker <i>evaluation:</i> Fringe lake also has potential for outdoor recreation	<i>adapted design:</i> Circular free standing ring, with fringe lake widening in convenient places for water recreation <i>context change:</i> Environmental awareness Climate change concerns Decrease in relevance of outdoor recreation	<i>cancellation:</i> Last polder (Markerwaard) was cancelled and nature development was done instead. <i>modifications:</i> Fringe lake shores were made more natural Dikes were heightened in face of sea level rise Wind turbines were placed along dikes Recreation villages were added along dikes

Table 2
Adaptative phasing and naming of the polder construction.

Name today	Actual sequence of construction	Name in 1949 masterplan**	Name in original 1941 plan*	Planned sequence of construction
Wieringermeer	1	Wieringermeer	Wieringermeerpolder	1
Noordoostpolder	2	Noordoostpolder	Noordoostelijke polder	3
Oostelijk Flevoland	3	Oosterpolder	Zuidoostelijke polder	4
Zuidelijk Flevoland	4	Zuiderpolder		
Markerwaard (cancelled)	x	Westerpolder	Zuidwestelijke polder	2

* Hemel and O'Loughlin (1994, p. 57, 94).

** Hemel and O'Loughlin (1994, p. 173).

pleasant and create a bay-like appearance at what are now Zeewolde and Lelystad. These efforts demonstrate that a conceptually determined decision does not imply that no subsequent details can be added or adjusted, as illustrated further in the next section (see Assumption (C)).

Not only did the engineers learn from experience and reconsider their choices but a continual adjustment process was also propelled by policy-makers at the societal level. A central town located within a ring of villages at cycling distance was constructed at the Noordoostpolder site. This spatial arrangement was logical, considering the rarity of automobiles at the time of this *polder's* construction. However, by the time the next (eastern) *polder* (Oostelijk Flevoland) was constructed, car use was expanding and the number of villages was considerably reduced. In the fourth *polder*, the two proposed settlements were shifted from initially suggested inland locations to the edge of the *polder* where their economic relevance would extend beyond agriculture. Almere accommodated the population overspill from Amsterdam and Zeewolde's economic relevance included its role in providing recreational water-based amenities.

While the initial 1918 blueprint for the overall project served to guide activities, it was simultaneously intended to be adaptive. And its content was not intended to apply to all details. The macro plan was the expression of a strategic concept that was robust, but its details and precise contours were constantly renegotiated (belying assumption C).

Many aspects of the plan reveal aggregated adaptivity because of adjustments made during every stage in the process. The proportion of forests planted as future nature reserves was increased with each successive *polder* (Table 3). Whereas forests were initially perceived as a waste of highly productive agricultural land, increasing affluence and leisure time led to the expansion of the *polder* forests during the execution of the project (Horlings & Blom, 2018). Another example of such adaptivity relates to the rise of truck-based transport for agricultural produce. Accordingly, the Noordoostpolder canals, which had ensured boat access for every parcel, decreased in relevance with each successive *polder* (Geurts, 1997).

Notably, when the Wieringermeer's dike ring was bombed during World War II, the released water formed a trench and stirred up the soil, making the site around the trench much sandier than previously. It was decided to rebuild the dike in a curve-shape around the trench, which still remains. Moreover, the site was converted into a forest (Geurts, 1997, p. 45) because the soil had become unproductive for viable farming. This example reveals post-construction adaptivity that was unimpeded by the blueprint.

In contrast to what Assumption (A) implies, the reconsideration of macro choices entails multiple actors' involvement. The relevant national ministers had to propose each successive project to the parliament, and various economic, cultural, financial, and geopolitical considerations had to be explained and weighted for every decision. Once the parliament had made a decision, the two executive bodies, DZZ and RIJP, had to work jointly at the meso-level to develop more detailed designs and decisions. Moreover, although the task of developing the *polders* to sustain future agricultural societies was delegated to these two organizations, other institutions contributed, especially those concerned about the spatial quality of the *polder* landscape (CCNL), the *polders'* value in the context of the national space (*Rijksdienst voor het Nationale Plan*), the quality of the settlements in the *polders* (*Nationaal Instituut voor Stedebouw*), and the value that the southern *polder* would have in alleviating housing pressure in Amsterdam (*Gemeentelijke Zuiderzeecommissie*).

As Geurts (1997); Horlings and Blom (2018), and Hemel and O'Loughlin (1994) have all explained in great detail, these institutions engaged in constant debates about what to do next; whether to adjust course despite the presence of a strong macro-level concept. They all put forward reports and plans in an effort to show how best to proceed. Even macro- and meso-level decision making was free of general frame rigidity.

Long-term macro concepts conveyed in blue prints led the way, were pragmatically implemented, and enabled meso-level decisions.

Table 3
An emergent pattern during the polder construction: increase in housing and forests not anticipated in the macro plan, but incrementally decided on meso-level in response to societal change.

	Size (ha)	Parcel distribution	Agricultural (% ha)	Housing (% ha)	Forest and nature (% ha)	Water and infra (% ha)
Wieringermeer	20,000	1934–1941	90	2	3	5
Noordoostpolder	47,600	1947–1962	86	4	5	5
Eastern Flevoland	54,200	1962–1976	67	11	15	7
Southern Flevoland	43,000	1978–1992	44	12	35	9

Source: left two columns Schimmel (1987), right four columns Van Lenthe (1988).

5.2. Adaptiveness in the meso-level choices for the IJsselmeerpolders

Assumption (C) clearly did not apply to the IJsselmeerpolders. The existence of a blueprint conveying the main intention at the macroscale did not imply that each and every meso-scale aspect of the IJsselmeerpolder project was defined from the start. There was a hierarchy: the macro plan served the main structures, mostly specifying the shapes of the dike rings and was adjusted when considered necessary. The details at the next level, which were defined for each successive *polder* project, were, in a sense, incremental and pragmatic. A blueprint can prescribe particular structures, while remaining silent on the details, which can be filled in later.

At the meso-level, many options remained, and decisions were made immediately prior to construction in light of the latest insights relating to the best course of action. Thus, a continual cycle of learning and re-evaluation occurred. The locations of the main drainage canals and pumping stations were determined by the topography that led to the design of a road network and a pattern of agricultural parcels that, in turn, led to intersections in the network of canals and roads that were favorable for establishing a settlement. These meso-level blueprints (a *Verkavelingsplan* for the parcels, a *Beplantingsplan* for forests and trees along main roads, and a *Dorpenplan* specifying the number and location of settlements) were drafted much later than the macro-blueprint around the drainage times of subsequent *polders* (Fig. 3).

As for the macro-level plan, there were dynamics associated with these three types of mesoscale plans during their design and implementation phases and during the *polder's* usage phase.

During the design phase, each of these mesoscale plans was subjected to an extensive and interactive cycle of designing, proposing, discussing, and adjusting before culminating in an official (ministerial) decision. Geurts (1997, pp. 60, 72–75, 111–117, 120–121), Horlings and Blom (2018, p.76) and Hemel and O’Loughlin (1994, pp. 218–225) have shown that for all three types of plans (parcels, plantations, and settlements), a basic concept and elaborate and detailed alternative maps were reconsidered and adjusted many times before a decision was taken on what would be implemented. Even for the last *polder*, Markerwaard, which was never actually built, an intensive design process that was extensively debated was undertaken for the fringe lakes and landscape structure during the 1940s (Hemel and O’Loughlin (1994, pp. 88–120, 141–162). Thus the planning process was not framed as narrowly as is widely thought.

In the intervals between design phases of successive *polders*, a learning cycle was evident, revealing sensitivity to changes in the societal context. For example, the designers of the subsequent *Verkavelingsplans* were responsive to changing views on the ideal sizes of farms and parcels. Thus while parcel size in the Wieringermeer *Verkavelingsplan* of 1929 was 250 × 800 m, it was increased to 300 × 800 m in the Noordoostpolder *Verkavelingsplan* of 1947, 300 × 1000 m in the plan for the eastern *polder* in 1956, 450 × 1000 m in the plan for the southern *polder*, and 500 × 1200 m in 1968. Further an experimental size of 500 × 1700 m was tested (Geurts, 1997, pp. 30, 53, 120, 181; Horlings & Blom, 2018, p. 29). Every *polder* was a product of its time and associated norms. The macro-level blueprint still allowed the application of the latest insights in developing meso-level blueprints.

Settlement plans (*Dorpenplan*) also evidenced a learning cycle between *polders* and pragmatism in their implementation and a sensitivity to context that extended from the design phase into the implementation phase. The designers of the 1983 Zuidelijk Flevoland settlement plan were aware that agriculture had ceased to attract much labor and could no longer be the basis of a town’s

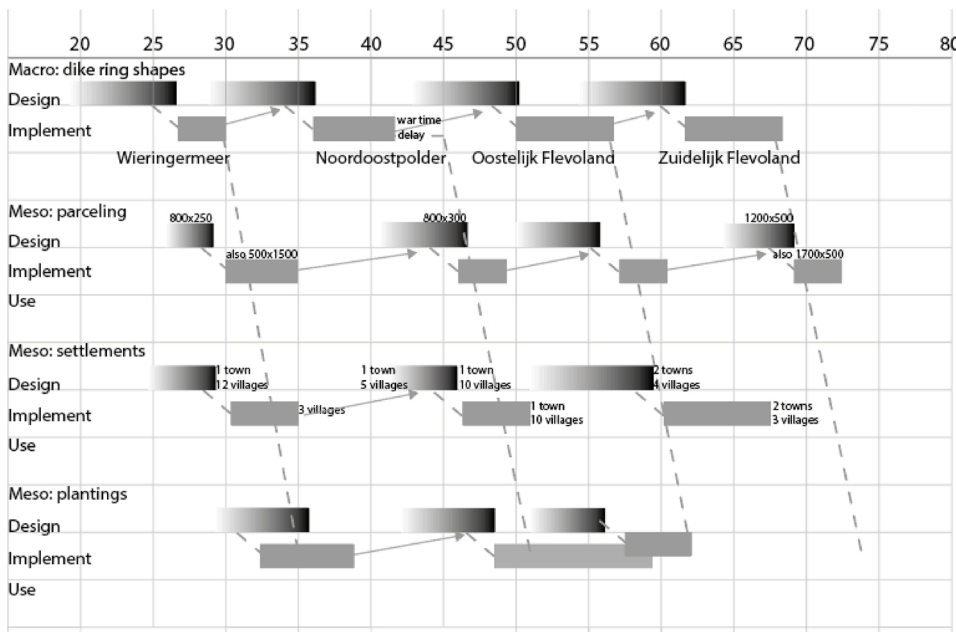


Fig. 3. Timeline showing when what plan was made when, divided in macro and meso, the design/implement/use phasing and their main content. Each polder is the product of an extensive period of designing and implementing (dashed diagonal line) and each next polder learns from the previous one (solid diagonal arrow). Based on the dates provided by Geurts (1997).

economy. Therefore, different economic rationales configured the last two settlements: water-based recreation configured Zeelwolde, which was developed alongside a lake rather than amidst farm land, while Almere, which was developed in close proximity to Amsterdam, came to be conceived as a base for commuters.

Construction of Almere, a city currently accommodating over 200,000 inhabitants, which was not even mentioned in the *Verkevelingsplan* up to the late 1960s, began in 1975. Its shape was not even decided on till the early 1970s (Van Diepen, 2007). A rapid reconsideration of housing pressures in the Amsterdam region justified the need for this city, and the *polder* provided the required space.

Learning was based on previous experience but also on shifts in societal priorities. Water management and food production were pivotal in the formation of Wieringermeer and Noordoostpolder, which was logical in light of the historical context of the wars and limited mobility of people and goods. By contrast, a booming and affluent population elevated housing and recreation facilities in the political agenda following the 1958 Memorandum *Westen des Lands* and the 1966 Spatial Planning Memorandum. Consequently, these were defining factors that shaped Eastern and Southern Flevoland. Thus, land use within the main planned structures of the emerging *polders* could easily be adjusted,

Geurts (1997) and Horlings and Blom (2018) note that these plans were also reconsidered and adjusted *whilst being implemented* (Geurts, 1997; Horlings & Blom, 2018), indicating a moderate level of implementation rigidity (Assumption D). The blueprint plans were adhered to in practice but only until it was necessary to reconsider initial choices. For example, the official plan for the Wieringermeer polder, formulated in 1927, had one city and 12 villages. However, only three villages were actually developed in 1931, 1932, and 1935 respectively (Geurts, 1997, p. 34), because additional villages were not deemed necessary. The Noordoostpolder was initially designed to include one city and five villages according to the draft *Dorpenplan* in 1937. However, in the final *Dorpenplan* of 1946, there was one city and 10 villages, all of which were built and remain functional to this day. Conversely, whereas the *Dorpenplan* of 1952 for

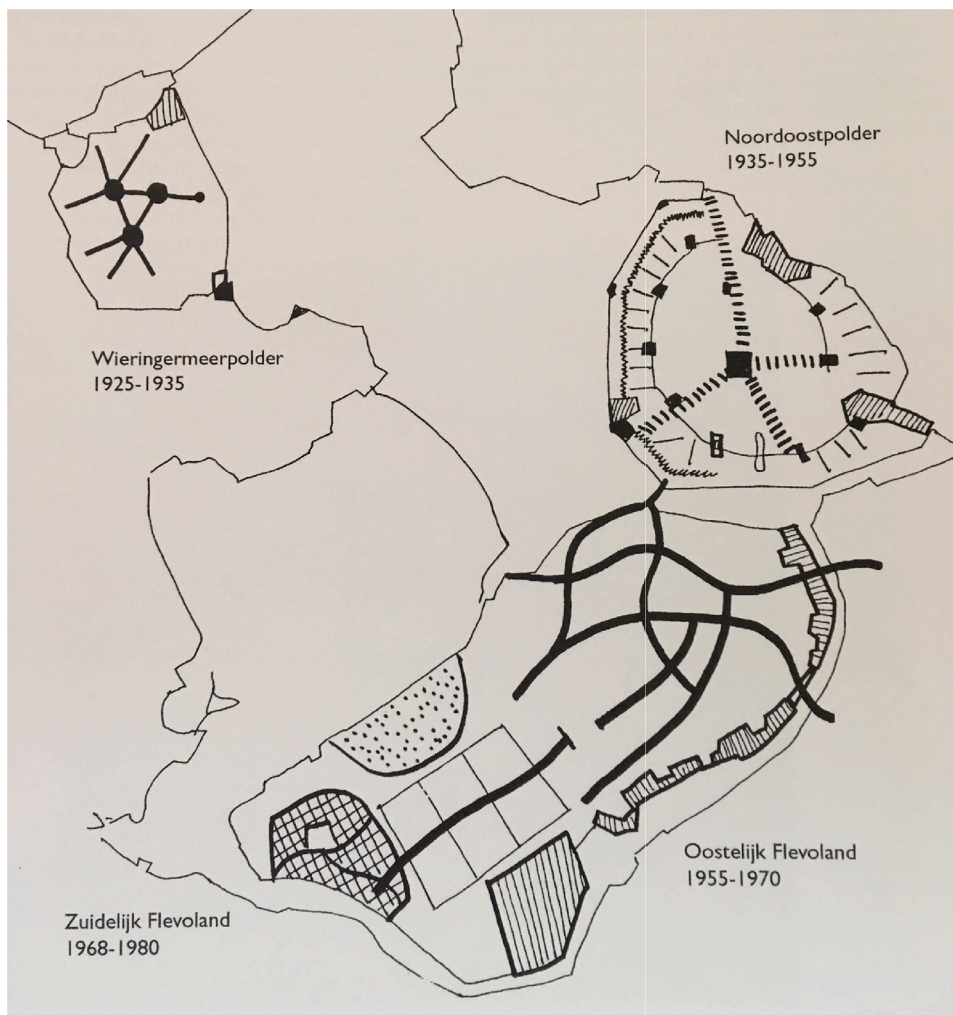


Fig. 4. Progression of landscape forms during the project as visualised in hindsight by Horlings and Blom (2018), however not being planned this way from the start in 1918.

the eastern *polder* contained 12 settlements, there were 10 in the revised plan of 1956, six in the plan of 1959 and only four were actually built. The two unbuilt villages were not even officially cancelled; they were just never initiated. These examples not only reveal adaptations in design but also changes during plan execution. Even after it is sanctioned, a blueprint does not have to be rigidly adhered to in the implementation phase.

The *Beplantingsplannen* reveal an evolution with each consecutive *polder* and were also implemented pragmatically. Several sites became forests or new nature reserves that were not designated as such in the plans. Small additions of preserved areas were made in Kamperhoek and Knarbos (p. 33), where ecological values emerged during the cultivation of the *polders*. Newly created forests were also modified during tree planting (Horlings & Blom, 2018, p. 117).

A major adjustment occurred in the industrial zone, which remained prominent in the 1971 blueprint and was actually converted into an extensive wetland area known as Oostvaardersplassen. The creation of this wetland, in turn, prompted the adjustment of the intended railway line route in 1981, deviating from the 1978 route that partly traversed the area (Horlings & Blom, p. 165). Roads and canals, the construction of which had already begun, were cancelled and adjusted (Horlings & Blom, p. 194).

Even parcelling plans were adjusted at various points of implementation. Parcels in Oostelijk Flevoland adhered to the official 1962 plan until soil characteristics and economic development cast the intended orchards in a different light, leading to the plan's adjustment in 1964, and again in 1969. Eventually, only 1200 hectares of orchards out of the planned 2500 ha were realized (Geurts, 1997, pp.129–130). Unexpected soil properties also led to later modifications in planned orchards in Zuidelijk Flevoland (Geurts, p. 175).

Each plan was designed in the context of a dynamic debate involving multiple agencies engaged in a constant learning cycle, and the implementation was adaptive when new information became available. This process resulted in a series of landscapes with distinctive features (Fig. 4). Subsequently, during the usage phase, adjustments continued to be made, mostly at the microscale.

5.3. Adaptiveness in the micro-choices made in the IJsselmeerpolders

Following completion of the macrostructures built over a long-term learning cycle, and the drafting and implementation of mesoscale plans, entailing a mid-term learning cycle, many micro-level choices remained to be made and continue to be made. This process too involved discussion, proposing, deciding, and pragmatic implementation. The same cycle of design, decision making, implementation, and usage occurred at the microscale, with adaptiveness evident in the framing, phasing, content, implementation, and use.

For example, all of the built settlements underwent their own unique design processes, leading to the formulation of maps, actions, and adjustments at the microscale. No macro- or meso-level plans restricted the development of a village design deemed most appropriate for that time and place. In the Noordoostpolder, every village's master plan was the result of a unique process based on the site's distinctive qualities (Table 4). The same goes for the various forests that constituted the main green structure of Flevoland; they too were designed by various designers over a long duration (Horlings & Blom, 2018, pp. 58–63).

Deviating from the *Dorpenplannen*, several new settlements were added much later. For example, Schokkerhaven (close to Ens), Ketelhaven (close to Dronten), and the Golfresidentie (Harderwijk) were not in the blueprints; they were designed and created later. Similarly, many of the forests projected in the mesoscale *Beplantingsplannen* were designed and adjusted in more detail later. Even the prefab barn design used throughout Noordoostpolder went through a cycle of learning and adjustments (van Lenthe, 1988, p. 66).

Blueprints helped to align initial actions but did not impede adjustments once these initial actions had been implemented.

Microscale designing and adjusting processes have continued into the present. The rise of the leisure economy meant that the canals, originally built for drainage and cargo shipping, also became popular sites for pleasure boating, with appealing ports and docks added later. The rise of ecological awareness led to the creation of gently sloped canal banks, the installation of wider culverts that enabled small mammals to cross roads, and adjusted forest management. Housing preferences prompted the demolition and replacement of sections of the original housing in the *polder* towns.

Both villages and forests underwent many adjustments during their use phase. The villages expanded with new built homes, buildings were assigned functions differing from their original ones, or removed, green areas were used differently, and public spaces

Table 4
Variety in designers and design concepts of selected Noordoostpolder villages.

Village (year of first construction)	Lead Urban Designer	Main village structure principles	Leading architectural principle
Marknesse (1944)	Th.G. Verlaan	Circular perimeter around an intersection of roads and one central open space with public buildings	Delftse School
Kraggenburg (1948)	P.H. Dingemans	Central village green with public buildings, surrounded by residential land use. Roads go around the village	Nieuwe Bouwen
Rutten (1953)	W. Bruin	Village square with public buildings surrounds the intersection of main roads that divides the village in four quadrants, one of which is to remain green for sports	No specific signature
Nagele (1954)	A. van Eyck and van Ginkel*	Ring of small court greens connected by a village ring around a central village green, main road surround the village	Nieuwe Bouwen
Tollebeek (1957)	Th. Nix	No central village green, the village instead lines a main road and has smaller greens	No specific signature

* This village was used by a collective of the most esteemed young architects at the time as a study object for their 1949 CIAM contribution. The adopted design was a result of the collective's explorations (Doevendans et al., 2007).

were redesigned. This revision process continues to this day, thus refuting Assumption E (output rigidity). Similarly, the addition of mountain bike routes, adaptations of water bodies, removal of forest parking lots, and establishment of recreational enterprises have occurred in all *polder* forests.

The blueprints helped to set off the villages and forests, which was indispensable for instigating a cycle of use, evaluation, and adjustment. Internal forest designs, in particular, were repeatedly adjusted because of poor species selection and new insights into species combinations and diseases (Horlings & Blom, 2018 pp. 74, 118, 129) as well as new societal preferences. A new vision for the future of the Horsterwold was evident in a 1996 plan. Tree planting along main roads to divide up the vast flat landscape, was partly adjusted because farmers were concerned about shade and the tree roots growing into their parcels (Geurts, 1997, p. 77).

Almere is particularly illustrative of this process. Adaptivity was *planned* for in its blueprint. Knowing that the city would continue to grow fast over a prolonged period of time, the design team made the principal choice in 1970 of a multiple-nuclei city model with one center that could be expanded depending on the sizes of the components (see Van Diepen, 2007 for a detailed reconstruction of the city's design phase; see also Guerts, 1997, p. 177 and van Duin et al., 1984, p. 166-168). Every component was developed sequentially: Almere Haven (the first homes were built in 1976), Almere Stad (1980), Almere Buiten (1986), Almere Hout (1992), and Almere Poort (2007). Each area offers a living environment that appealed to house buyers at the time of development. Ironically, the last part, although based on a blueprint, has been profiled as being particularly easy on planning control toward developers and buyers, seeking to distance itself from the disadvantages of blueprint planning.

The same goes for the forests intersecting with and surrounding Almere. They were designed on the drawing table with the explicit purpose of creating a robust green structure that would enable the various pockets within that structure to be filled in later while remaining dynamic (Geurts, 1997, pp.189, 190; Horlings & Blom, 2018, pp. 66, 67). Then in 2005 a new vision for their future was launched (idem, p. 8), and again in 2013 (Almere, 2013), and so the cycle continues.

6. Discussion: casting aside the hesitation to engage in long-term strategic planning

This critical case study has yielded several insights that contribute to the debate on how to develop strategic action within long-term perspectives, while being adaptive to unexpected changes. It confirms that “despite the general agreement over the paradoxical and contradictory nature of planning (i.e. planning is about controlling complexity), it is fundamental to better profile the elements that constitute such paradoxes and the way they are interrelated” (Savini et al., 2015, p. 311).

The critical case discussed in this paper shows that there can be independent dynamics in societal ambitions (the long-term perspectives), the governance mechanisms to pursue them (strategy) and the operational choices made (implementation) at the same time. It shows that perspectives can change from flood safety to food production to suburbanisation, while the strategy remains to drain shallow waters and preparing the reclaimed land for the uses we need most. A rigid process strategy appears to have served a dynamic long-term agenda, therefore agenda dynamics does not require strategy dynamics.

The Casco concept (low dynamic mesh of infrastructure and nature reserves carrying high dynamic cells of urban and agricultural uses) applies to processes as well: some processes are relatively rigid, *enabling* more agile and adaptive processes on other scales and issues. The assumption that adaptiveness should be an overriding value in strategic planning is an overgeneralisation.

When the strategy led to the implementation of *polder* projects, the simultaneous existence of rigidity and adaptiveness again was evident. Although the plan-formulation routines remained constant and the conceptual overall choices were visualised in official plans there was adaptiveness in their implementation. Frames of thought about the details were diverse and dynamic, phasing and timing of the process was adjusted constantly, every plan left many topics unspecified thus to be determined later on, implementation often deviated from the plan for good reason, and the final physical product of all these efforts would be adjusted over time, sometimes even

Table 5

Five dimensions of rigidity in relation to the three levels of scale, applied to the IJsselmeerpolders project.

Phase	Design	Implementation			Use
Popular connotation	Rationality rigidity (A)	Phasing rigidity (B)	Encompassing level of detail (C)	Implementation rigidity (D)	Usage rigidity (E)
Macro	Two agencies (DZZ/RIJP), parliamentary accountability, challenged by external institutes	5-stage process, reassessment of timing and sequence after every stage	Only dike rings, main drainage canals, roads and fringe lakes were specified	Once decided little changes	Monofunctional structures enabling land use, their position and usage unchanged
Meso	Various actors and considerations involved	Pace and sequence were not specified	Only main structure of roads, canals, settlement pattern and plantations	Roads and canals fixed, part villages were not initiated, forests were enlarged	Land use on parcels was flexible, villages transformed, roads were added
Micro	Municipality and residents involved in making choices	Highly adaptive to demand and preferences	Detailed designs for settlements and forest	Village street and zoning plans were once decided rigid	Settlements and forests are in constant cycle or renewal

Various designs were presented since 1880 for a system of dikes rings with minimum length generating maximum acreage of productive land align="5.65pt"

radically.

The act of making plans does not deny the value of adaptiveness. The selective and relative rigidity of strategies and blueprints have always gone hand in hand with pragmatic adaptiveness in their long path toward implementation. They are a duality enabling and producing each other. On every step of the way, one phase was infused with learnings derived from the former, as well as with new demands from the evolved context. But amidst this pragmatism and learning, the strategy of drafting blueprints gave structure, clarity and stability.

The question is not whether the plan-making needed to respond to the challenges of our time needs to become adaptive. Plan-making has always been adaptive to some degree. It is unhelpful to make adaptiveness an overall imperative. This paper shows that the level of adaptiveness can be higher or lower depending on the scale or on the planning aspect within a scale (frame, exclusiveness, implementation, timing, or usage; see Table 5). Some aspects may *need* to be rigid to *enable* adaptiveness relating to other aspects.

Provided that it is used pragmatically, a blueprint can foster a temporary illusion of clarity and certainty, while knowing that plans can be adjusted when necessary. Every plan is simply a representation of shared intentions at a certain point in time. Blueprints help to clarify the larger picture, signaling a high likelihood of what will become reality, mobilizing funds, and political willingness. But their implementation proceeds pragmatically, and thus adaptively, even within a mega-project like the IJsselmeerpolders. When 30-year land use ambitions are expressed but reevaluated every 5 years, the illusion of both malleability and pragmatism can be simultaneously accommodated. Although the blueprint suggests the naive aspiration of definitiveness, every plan maker and user knows that it will shortly have to be recalibrated, but until that time, everyone concerned acts as if the plan will become reality: this is the essence of strategic planning.

It is telling that makers of a blueprint that served as a guiding principle, also expressed a desire to continue the debate on polder design. They explicitly expressed in the ambition to work with an “open plan” in 1961 (Geurts, 1997, p.108) and to avoid end-state planning because the world had changed too quickly to plan rigidly. This aspiration reveals that in the 1960s already planning was seen as an attempt to fuse adaptivity and determination on how to move forward.

Therefore, there is no need to refrain from drafting and sharing concrete strategic intentions, visualized in blueprint plans if necessary. The vision-as-a-map depiction is helpful as it facilitates debate, expectations and discussions on options, and provokes to find alternatives. A government can and should steer by persuasion, seduction, and inducement. These frames continually shape and are shaped by the flow of actions. A plan is always a *snapshot of the intentions of that moment*; it will not, does not nor can it ever have the intention, the power, or the public support to impose investments that later appear undesirable. The intentions merely present “rationales that justify operational decisions” because the plan “frames argumentation and facilitates negotiation” (Balz & Zonneveld, 2018, pp. 363–364).

The IJsselmeerpolders learning cycle explicitly reveals what often happens implicitly: although plans appear to control the future, in practice, they are frequently revised. But without this illusion, no general belief will grow and no concerted action will happen. As Meyer (2020) shows, when this logic is extended, even a string of rigidly implemented short-term plans can yield a meta-pattern of adaptiveness. Specifically, Meyer revealed coastal cities’ adaptiveness in hindsight, although the separate actions performed were not intended to be flexible. Over the course of centuries, adaptivity is always present, even when planning is rigid.

Pleas for adaptivity are meaningless if not refined in terms of what, when and why. As we have shown, there are multiple ways in which strategic action can be adaptive. Moreover, these ways can be applied differently for specific elements such as dikes, roads, canals, settlements, road design, and land use. For some of these elements, rigidity is healthy and inevitable. For others, adaptiveness is preferable. All planning is adaptive on some issues and at some time scales. The key questions are not *if* but rather *which* project components should be adaptive and which ones should remain constant, and why, and what time-scale should be used for measuring adaptivity. The cycle of evaluating and adjusting course pertaining to the main concept or the details can be fast or slow. (Horlings & Blom, 2018, p. 34).

When blueprints are conceived in this way, they should be credited for their harmonizing and mobilising effect of expressing and signaling ambitions. Long-term perspectives and strategies on the great challenges of our time deserve to be thus materialised.

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