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Published in:
Urban Studies

DOI:
[10.1177/0042098014544764](https://doi.org/10.1177/0042098014544764)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2015

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
van Dijk, T., & van der Vlist, A. (2015). On the interaction between landownership and regional designs for land development. *Urban Studies*, 52(10), 1899-1914. <https://doi.org/10.1177/0042098014544764>

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On the interaction between landownership and regional designs for land development

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Urban Studies

2015, Vol. 52(10) 1899–1914

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DOI: 10.1177/0042098014544764

usj.sagepub.com



Abstract

This paper examines how landownership patterns are, partially, both a result of and a condition for the designs that planners make for sites. Designs emerge in the process of arriving at a development plan, preceding formal plans and decisions. We claim that during that process, landownership and designs are responsive to each other. To explore this interaction, we analysed two large development projects in the Netherlands. These two projects involve regional designs followed by anticipatory land acquisition by private and public agents. For these projects we reconstructed a timeline for the designing process that we positioned parallel to the changes in landownership. The result shows that the governments that took the lead in the projects added more detail to the plans only after they secured their active role for themselves by acquiring a dominant ownership position on sites eventually meant for housing. This analysis prompts an ethical discussion on government's double role in active land policy.

Keywords

active land policy, decision making, land use change, path dependency, regional design

Received September 2012; accepted May 2014

Introduction

When public planners make *regional designs* that visualise preliminary intentions for future land-use conversion and real estate development, they become part of a complex process in which the designs anticipate existing landownership, and landownership anticipates the contents of the design as well. As a consequence, regional designs are both the result and the cause of landownership.

The designs are the colourful images that convey intended future land-use, and while being far from final and representing preliminary visions of certain organisations (typically governments) rather than definite and formal *regional plans* as yet, they do fuel expectations,

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triggering both private and public land acquisition. This paper theorises on the interplay between landownership and regional designs based on evidence about regional designs that became more detailed after the government secured public landownership.

Landownership plays a vital role in the design process of both brownfield and greenfield development planning. Landownership affects the implementation of, as well as is affected by regional designs. The regional designs that precede the formalisation into regional plans fuel expectations at a very early stage. Owning land parcels within the boundary of the regional design represents both power and profit. Power, because landownership endows people with much influence on future land-use. Profit, because the gains from land-use conversion and real estate development have been substantial over the last few decades.

Therefore, in most Western countries public planners will have to deal with landowners when designing development plans. Public planners basically follow one of the two strategies. First, they can adjust designs before they become formalised into plans, so as to bypass landowners that may be hard to negotiate with. Second, governments may opt for active control and the public acquisition of land, choosing to become public landowners themselves (Lefcoe, 1977; Louw, 2008; Needham, 1992). The latter is what one observes in regulated markets found in European countries such as Sweden and Germany (see Nozeman and Van der Vlist, 2014), as well as in less regulated markets such as the US (Holway, 2011).

Governments who actively enter the local land market have a dual interest. They play both a role in passive regulatory control through public planning (being the 'referee'), and in active control through public landownership (being a 'player'). This may very well result in passive control that depends on the active control of acquiring and disposing of

land. There is a tension between regulatory control through democratically legitimated public planning and active control through public landownership. We think that this is an important insight that we will inquire into in this paper.

The literature on the interplay between *public* landownership and design is thin. First, most of the literature on landownership in planning relates to *private* landownership and how it affects plan implementation. Adams and colleagues (Adams and May, 1991; Adams et al., 2001, 2002) consider how fragmented private ownership complicates design and delays projects. Menezes and Pitchford (2004), as well as Louw (2008) more recently, suggest that delaying negotiations can be a deliberate strategy of landowners to get a higher price for their land. *Public* landownership may then speed up the development process. Second, most of the literature on landownership heretofore indicates that landownership affects the implementation of regional designs, however, assumes the design to be exogenous to landownership. Literature that theorises on the interplay between landownership and regional design is absent.

It is the aim of this paper to address the interplay between the content of landownership and regional design. How should one understand private and public landownership dynamics? How do landownership and regional design interact? In the empirical section, we will explore these two questions using information from two large regional designs in the Netherlands. These two cases involved regional designs followed by anticipatory land acquisition by both private and public agents. For these two cases, we have detailed information on landownership and the regional planning design process over time which allows us to study the interplay between landownership and the regional planning design. We investigate how landownership affects regional designs while

regional designs, in turn, is affected by the dynamics in landownership.

The cases were taken from a Dutch institutional setting where building rights are held by landowners, but actually erecting a building is only allowed when permission is given by the municipality. Only municipalities make binding zoning plans, that however need to comply with provincial and national strategic plans and guidelines. So, Dutch governments produce designs and plans on land development on three interconnected levels. In addition, all three tiers of Dutch government can and do perform anticipatory land purchases in order to promote land development consistent to governmental plans. Only the municipalities collect property taxes, which are there as the only significant local source of revenues; the rest of their revenues are from fixed allowances out of a share of the national taxes (Municipality Fund; Allers, 2011; for figures, see Allers et al., 2010). Active land policy through their Development Departments (*Grondbedrijven*) was a significant supplement to this municipal income, until real-estate markets collapsed (Berns et al., 2010). In contrast, US cities operate quite differently (Dreier et al., 1995; Lewis and Neiman, 2009) although specific policy programmes may apply as well (Towe et al., 2008; Turnbull, 2005).

We theorise based on our two Dutch cases, that plans and ownership are mutually dependent, and in a cyclical, non-linear way. In one case, we observe that the province initiates the regional designs, whereas in the other case it is the municipality that initiates the regional design. The two cases, besides contextual differences, reveal some important regularities. First, we observe that the transitory dynamics in private and public landownership is affected by regional designs. Further and more important, we observe that the public actor who take the lead in the regional design is also the public actor that becomes landowner. Third, we

observe that the regional designs are broad brush at first, with details on land-use conversion and real estate development only added after the government secured itself a dominant ownership position.

The organisation of this paper is as follows. First, we describe the theoretical background, establishing which pieces of current theory are useful and which are missing in the current literature. We then present the methods we used to collect the data, on which this study was based. The subsequent section presents the empirical results. A discussion on the double role of governments follows, and, finally, conclusion and directions for future research are presented.

Power of ownership and power of designs

How public and private actors behave is of great importance in understanding the interplay between landownership and regional design for land-use conversion and real estate development. Public actors thereby include both public planners and public landowners, while private actors include private landowners.

Landownership and planning

Landownership matters in regional design, because it includes extensive constitutional property rights. Property rights give landowners the exclusive right of control, although they must respect non-ownership impacts such as government regulation (Lusht, 2001). Private landowners typically control their land so as to maximise lifetime wealth (Anas et al., 1998; Miles et al., 2000). In practice this relates to a multitude of issues relating to the timing of the development, and the development programme. In addition, landowners may decide to sell off their land to other actors, making landownership a dynamic process. The landowners'

rights to convert land-use from farmland to construction land for real estate development is restricted by planning regulations. Planning regulation such as zoning plans thus defines the urban fringe boundary: land inside the urban fringe boundary is construction land, whereas land outside the boundary is farmland. Planning regulations through zoning, building height control and density restrictions, cause a considerable value difference between restricted, undeveloped farmland outside the urban fringe and unrestricted, developable construction land within the urban fringe (Alonso, 1964). The urban fringe boundary is not static but might change over time, so that at the urban fringe, there is a likelihood of land-use conversion (Evans, 2004). Some places are more likely than others to become available for development. Changes in planning regulations then represent a redistribution of wealth across landowners (Dekkers and Rietveld, 2009).

Landownership affects the regional design as well. The NIMBY (not in my back yard) literature is the most explicit in showing that landownership represents power possibly affecting planning regulations so that plans respond to landownership. When a road or a new residential zone is designed to be built in the 'backyard' of a landowner who does not want to sell or refutes the conditions offered by the government, plans may have to be adjusted (Devine-Wright, 2005; Wolsink, 2000). Furthermore, when private landowners do want to cooperate, governments may have to negotiate what kind of development they will allow, that is, whether they will invest in highway ramps, or public parks.

Therefore, public planners by eventually setting formal restrictions (like zoning regulations), in line with their designs, foster land use changes. To avoid having to negotiate with private landowners, governments may acquire public landownership. In fact, the

provision of construction land in many developed countries has been an exclusively municipal undertaking for a long time (Louw, 2008; Needham, 1992). Nonetheless, prospects of high profits have triggered wide-scale speculative land purchases by private landowners in the Netherlands (Groetelaers, 2004), in other European countries such as Sweden and Germany, and in the US. Public landownership is increasingly used as an instrument to pursue nature conservation, open space preservation, and growth management goals. Although originally used mainly by non-governmental organisations (NGOs) to safeguard fragile habitats, regional governments currently have intensive land acquisition programmes (Chapin and Coutts, 2011), as have some local governmental planning agencies (Seltzer, 2009).

Planning and landownership

Regional plans are the result of a regional design process. The regional design process and the resulting implementation plan were in the early planning literature considered as part of a linear, technocratic path following from a deliberate implementation process. In more recent planning literature, the design process has been considered by Hajer and Laws (2006), Healey (2007), and Van Dijk (2011) as a cyclical and more subtle mental process in which designs develop. This perspective is rooted in the work of Hoch (2007), Hopkins (2001), and Throgmorton (1996) who argue that interactively drafting and communicating the 'imagined futures' that are conceived on the drawing table leads to changed expectations that already inform action. For example, land development designs for real estate development or infrastructure may be one of the reasons that cause actors to buy or sell properties in anticipation of the expected land use changes.

Plans then emerge from a cyclical process of design and re-design, taking into account

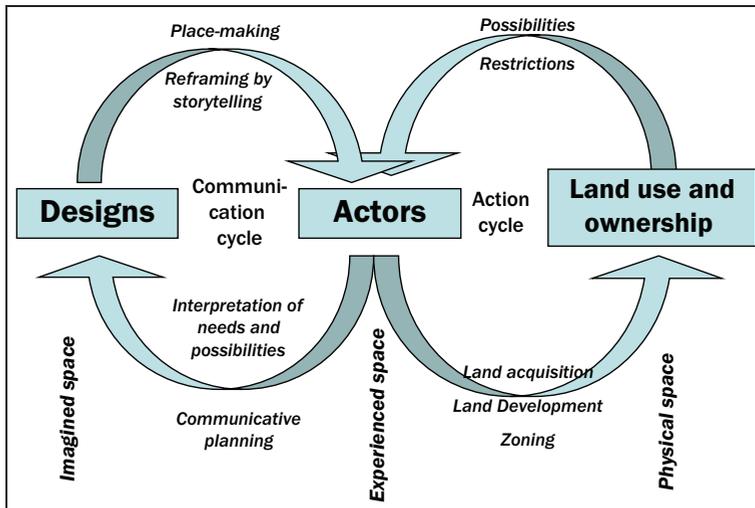


Figure 1. Double loop of expectations and action.

all kinds of situational factors about the area, at the same time diffusely altering those very situational factors. Plans and space co-evolve, because people are cognitive intentional creatures. This suggests a strategic game in which landowners wait, while developers want to become private landowners but need certainty about the future land conversion. Governments want to be rational, open, and democratic about their design, but they also prefer to become landowners before developers do. This delicate balance was studied for the provision of land for social housing by Barlow (1993), and Needham and De Kam (2004), showing the strategic responsiveness to landownership but only for semi-governments and for relatively small land-use conversion plans.

Public landownership and public planning

The interaction between landownership and design by planners and citizens is given in Figure 1. Both private and public actors are depicted as 'actors' in the middle of the two related cycles. The left-hand cycle is about proposing ideas for future land-use that feed

into people's mental framework, leading to changes in the perception of problems and possibilities, influencing the content of these ideas. This is a cyclical communicative process. At the right, there is the cycle of action. Physical and legal spaces provide room for strategic action, the results of which change spaces. Opportunities are a given and a result at the same time. The actors stand in between: they are part of communication and action. This is how designs and (legal) reality interact through actors.

The public planner can play a double role here: communicating 'imagined futures' and undertaking action through land purchases. Even when the public planner itself does not strategically buy land, there is an interdependency between the public planning decisions and landownership. Local governments depend on investors and construction firms for all kinds of projects in their jurisdiction. They therefore maintain a good relationship with private actors. Van Rij and Korthals Altes (2010) discuss the interdependency, where construction or land development permits are negotiated and issued in return for cooperating in other development projects.

A relationship may be compromised when an investor undertakes anticipatory land acquisition but the public planner changes its plans. Investors may then try to persuade the local government to develop the site after all as they know that the local government risks losing a good relationship when not giving in to that request.

We studied the interplay between landownership and regional designs based on two cases to describe the transitory dynamics in private and public landownership and its interplay with regional design. These cases will be discussed in the next section.

Research method

With our perspective of continuous two-way interaction between landownership and regional designs for land development being relatively new, our research design involves exploratory case study analysis. Exploratory case study design is a suitable way to theorise and induce those mechanisms that the literature has not revealed before. The case studies are intended to demonstrate private and public landownership dynamics, and to understand how landownership and design contents interact.

In order to reveal the interplay between landownership and the design of plans, we use detailed information on landownership to reconstruct a time-line for each of the two cases. The time-line relates to the dynamics of landownership as well as the regional design process towards the formalising of the plans.

Case selection

Our research questions require that the case material allows us to reconstruct a recent regional planning process, where up-front land acquisition during the regional design process played an important role. Therefore, the time span of the project was important

for our case selection, as well as its reputation in terms of public land acquisition. In addition, we were interested in a project that would have a dynamic design component to it. And in processes with an iterative design or redesign component, it may become visible that ownership patterns and the design are interactively emerging. Of course, as often in case study research, the causality of the simultaneity has some degree of uncertainty, as coincidence and unknown causalities may be of influence as well.

We chose projects involving governments that explicitly pursued active land policy. Furthermore, we chose projects where the definite formal decision about plan execution was yet to be taken, to describe the subtle impacts of plans. Finally, the cases had to allow us to use online newspaper archives for reconstructing the planning aspects, and digital ownership information available for measuring the dynamics in landownership. Both meant the projects would have to have commenced well after 1995.

At the time of the study, several regional planning projects in the Netherlands allowed for an analysis of the type we wanted to do. One had the reputation of being deeply related to land speculation. That was the *Wieringerrandmeer* project (Case 1), some 70 kilometres north of Amsterdam. This was a project for building a new 900-hectare lake for nature development, water sports, and to build lake-side housing. The lake would turn Wieringen into an island again.¹ The second project was *IJsseldelta-Zuid* (Case 2), the complex political-administrative process of which was studied intensively by Hajer et al. (2010). Lying 100 kilometres northeast of Amsterdam, that project dealt with resolving higher river discharge by building a diverting canal, called the bypass. In that case as well, this was combined with nature development, recreation, and building high-end homes. In those days, construction of high-end homes

was seen as a way to generate revenues to pay for the lakes and the nature development.

Use of landownership data from the land registry

All landownership in the Netherlands is documented by the land registration authority (*Kadaster*, in Dutch). The data include documentary information on landowners, land-use, and last transaction price. For our purpose, we categorised landownership² into:

- private ownership by farmers and private homeowners;
- private ownership by companies (excluding farmers or private homeowners); and
- public ownership by local (municipal), regional (provincial) or national government.

To address the dynamics of landownership, we reconstructed ‘snapshots’ that referred to landownership maps of the project site at specific moments in time. Information on current landownership was readily available on digital cadastral maps. Making a reconstruction for a moment in the past is laborious, however. We obtained the information for each parcel and linked this to information on transaction dates and information about past landowners. This enabled the generation of snapshots of specific moments in the past. The dynamics of landownership were then revealed, which we aggregated into the categories of ownership indicated.

Choosing the exact dates for the snapshots

We chose dates for the generation of snapshots in such a way as to be able to examine the interplay between planning and the dynamics of landownership. As such, we first selected a number of crucial moments in the decision-making process. At that point, we then had three options. We could

generate a snapshot for the exact moment, despite the risk that the news about the crucial event might have generated land acquisition even prior to that date. We could measure some weeks previous to this moment in order to see how the situation was before the crucial event had happened. Or we could measure some months afterwards to see the direct impact of the event. We chose the second option by generating snapshots of landownership two months before each major decision in the planning process. This would provide the best image of the situation prior to the event. The next snapshot, dated two months before the next crucial event, was then regarded as a reflection of the effect of the preceding event, as well as the image of the situation prior to the next event. This way we could measure anticipation effects and dynamics in the public and private landownership.

How the designs changed during land acquisitions

This section presents the main lessons to be drawn from the two cases. We reconstructed and summarised both planning processes, creating a comprehensive time line of the important moments when the regional design became more definite. By linking decisive moments to snapshots of landownership, discussion about the relationships between landownership and regional designs became apparent.

The cases are from the Dutch institutional context. This means that landowners are not allowed to develop their land unless the local government permits development in a zoning plan, that in turn has to follow more strategic land-use plans. Building land is kept scarce, making it expensive, and landownership on building sites potentially profitable – for developers but also for the development departments of (*Grondbedrijven*) Dutch governments. Dutch governments typically take

an active role in land development, by acquiring land, zoning it for development and selling it off to developers who will build what the governments prefers to be built.

Case 1: The Wieringermeer project

The Wieringermeer project was initiated at the time that inclusion of private investment in public projects was rapidly gaining popularity in the Dutch neoliberal political climate. This project even explicitly promoted its emphasis on involving private investment and reducing the traditional role of governmental public accountability. We used the local newspaper *Wieringennieuws* in reconstructing the interaction between landownership and regional designs.

Initial situation. Although the first design dated from the 1980s, a viability study was first done in 1998 (Quintessens, 2010); meanwhile, the municipality of Wieringen managed to attract provincial attention for the idea in 1999, when it became included in the *Water Bindt* project. Again, viability was studied (Leurink, 2009) and approval of the idea on the part of nature conservation organisations grew. At that time, and before the actual political attention to this project, the project areas (marked by the green line) were dominated by the farmers as private landowners (white), but also the state agricultural land fund BBL (yellow), and the national forestry service *Staatsbosbeheer* (green) (Figure 2 Panel A).

Intentions grow, sparking first purchases. The province then gave the project a so-called UNA status, implying that part of the province's UNA fund (consisting of profits from selling off their former UNA (short for the regions serviced, being Utrecht, Noord-Holland, Amsterdam) power plant) would be earmarked for investment in the project.

In January 2003, EUR 29 million were officially assigned to it, one-third of the approximately EUR 100 million expected total investment needed. A project organisation was established in 2002, involving the province concerned, municipalities, and the Water Board. By September 2002, with the project formally organised but before democratic decisions had been made on the design, investment, or consent, the province had purchased a group of parcels in the northern section of the project area. It was not until the following year that funds were allocated.

Choice for a design, influenced by ownership. Purchases by the province continued into 2003, still before any concrete shape for the project was chosen (Figure 2 Panel C). The pink parcels were purchased by the municipality of Haarlemmermeer, where the national airport Schiphol is located. That purchase was probably made using funds for displacing farmers who had to move for airport expansion. A design contest to determine such form was initiated in October 2003 to persuade private parties to participate. The winner was chosen in February of the following year. It was a consortium of a dredging company, a developer, and a consultancy firm named *Lago Wirense* (Figure 2 Panel Y). The winning design projected the housing development on, by then, provincially owned land. Subsequently, negotiations between the governments involved and *Lago Wirense* commenced that led to an agreement of intent in mid-2004. Meanwhile, critical questions started being asked by the local community and provincial opposition partners about the fairness of the competition, partly prompted by news reports at that time about building-fraud scandals on a national scale.

Securing control. The two municipalities involved established pre-emption rights to

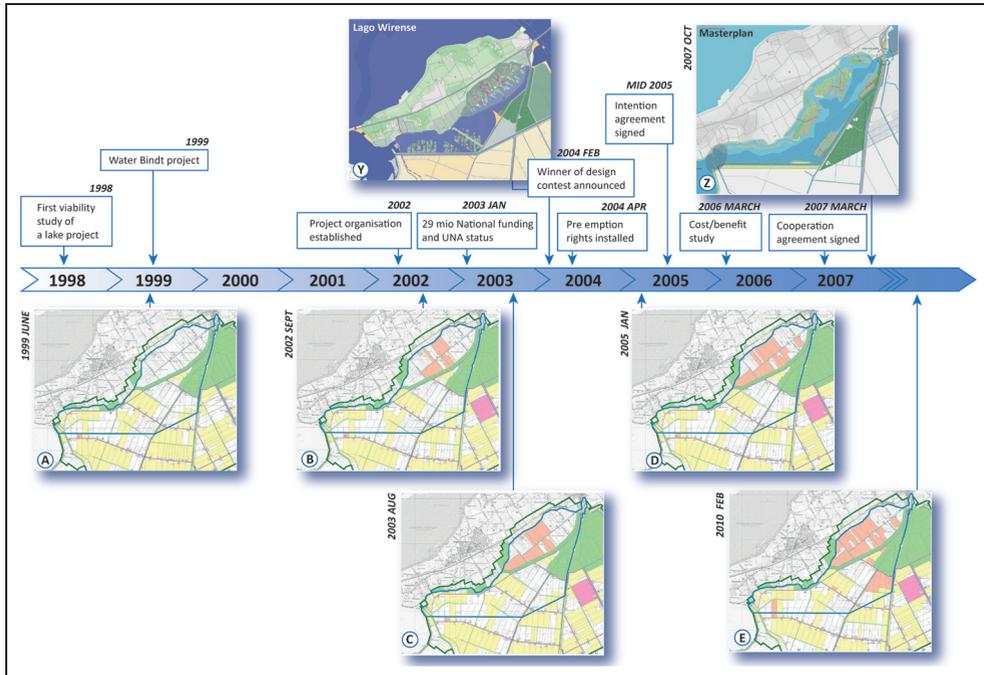


Figure 2. Timeline presenting landownership changes and policy decisions in the case of Wieringerrandmeer.

the area in April 2004, with an extension of their validity until mid-2006. No developers or other companies had purchased land at that point. The provincial government was the only party buying land. The opportunity for private parties to purchase land disappeared due to the pre-emption rights. From spring 2004 onwards, every parcel listed for sale had to be offered first to the regional government. So, up until the signing of the agreement of intent (Figure 2 Panel D), provincial landownership continued to expand. By 2009, the law permitted provinces to establish pre-emption rights, which the province of Noord-Holland did in September 2009. Meanwhile, the local government withheld its consent to the agreement of intent in December 2004, claiming insufficient involvement in the process, but those hitches were resolved by February 2005, opening the way to official signing of the agreement in March

2005. In the agreement of intent, one of the scenarios had already been chosen: Scenario 2a (Figure 2 Panel Y), projecting housing on provincially owned land. Only later were parcels purchased in the southern half of the project as well (Figure 2 Panel E).

Fall of the project. The preliminary cooperation agreement was signed in March 2007. During the course of the months that followed the official design for the lake was delivered: the *schorrenvariant* (salt marsh version), that later became known as the Master Plan (Figure 2 Panel Z). The expected cost then was EUR 320 million. The final cooperation agreement was accepted by the provincial parliament in March 2008. To direct the implementation of the plan, a land development corporation was established in February 2010. But rather

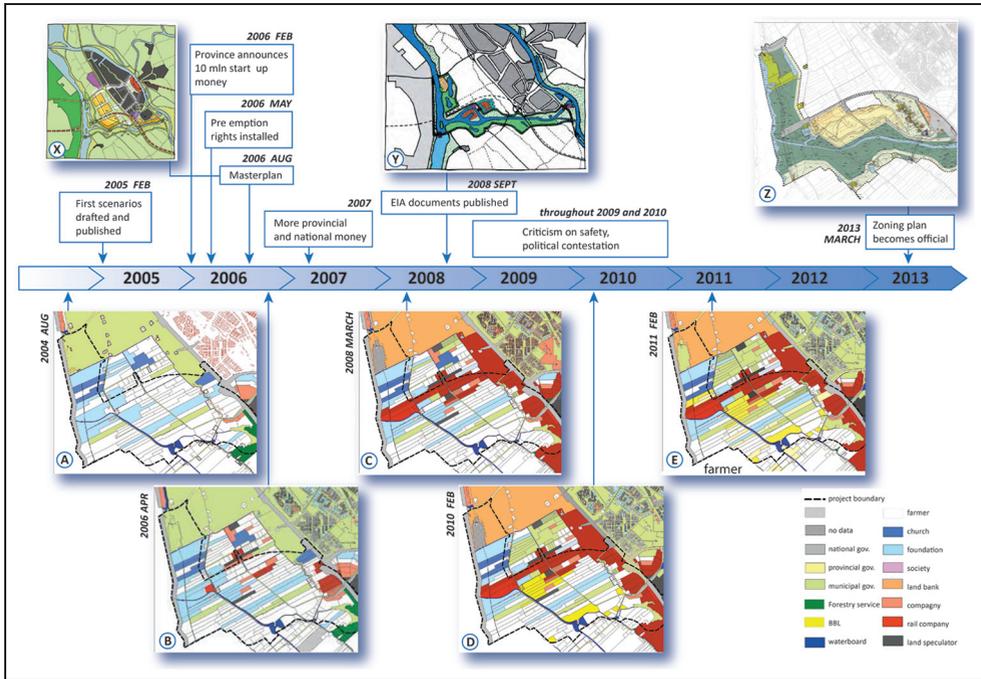


Figure 3. Timeline presenting landownership changes and policy decisions in the case of IJsseldelta.

suddenly, in November 2010, the province announced the project was cancelled. The risks were now considered too high, too little money from private parties had been invested, and, given the national budget cuts, the extent of public investment would be unacceptable.

Case 2: The IJsseldelta-Zuid Bypass project

Initial situation. From 2001 on, the municipalities of Kampen and Zwolle (just southeast of Kampen), and the province of Overijssel combined forces regarding spatial policies and launched a strategic vision. At that time, high real-estate prices and neoliberal ideology prompted a strong desire for planning as ‘development planning’ rather than just a regulatory framework, implying that governments should take an active role in site development. To underline this, the area around

Kampen (*IJsseldelta Zuid*), where river-bypass construction, railway construction, a new highway and housing were combined, was declared a national pilot for development planning.

In the pre-project situation, when no concrete plans had yet been designed, the bypass area (within the dotted line) mainly contained land owned by farmers (Figure 3 Panel A; August 2004). Some parcels were set-aside for nature conservation (dark green), the municipality owned some (light green), and so did Foundations (light blue). These can be considered coincidental investment parcels, not linked to the bypass.

Intentions grow: first designs made. The process then sped up. In April 2005 the first scenarios for the bypass, needed to divert the water from the river IJssel away from the city, were communicated and discussed by citizens and

a broad variety of other stakeholders. Within a year, the province allocated EUR 10 million to start the project. The plan was then conceived and it took off. The next snapshot, taken while the Master Plan was about to be published, (Figure 3 Panel B; April 2006), shows anticipation effects with some investors (light orange and dark grey) becoming landowner, as well as the railway company *Railinfratrust BV* (dark orange). No bypass-related purchases by the government yet.

Securing control. In May 2006, the municipality of Kampen established pre-emption rights for a large portion of the area, meaning that all land for sale must be offered to the municipality first. In August 2006, the Master Plan was presented, showing the general spatial structure of the area, which would pave the way to designing a spatial policy and which envisaged completion of the project by 2030. It projected a widely defined building zone. No specific sites were chosen yet.

In January 2007, the provincial government assigned another EUR 20 million to the project. The municipality officially began public land acquisition in March 2007, for land development of new housing and infrastructure-bypass purposes. In June 2007, the IJsseldelta-Zuid project was added to the national list of projects eligible for special funds (*Nota Ruimtebudget*), resulting in EUR 22.4 million from the national government in 2009.

In that period (Figure 3 Panel C; March 2008), with the project still in a positive flow, and housing sites generally defined, the railways had bought large amounts of land (dark orange), partly on the south side of the main road (visible in grey) where no railway construction was planned. The city of Kampen did not expand public ownership on strategic locations in the bypass plan. A probable speculator (dark grey) owned several parcels.

Growing criticism, detailing the plan, and public land purchases. The year 2009 saw – in addition to contestation of the project on the part of the public – a surge in criticism as to the safety of the plan, especially with regard to the consequences of a levy failure. Various studies were commissioned to determine the extent of these risks. During that year as well as in 2010, in reaction, several political statements were released at all governmental levels as to confirm the final execution of the bypass. At the end of 2011, a definite decision about the project was still awaited. The financial crisis made governments and developers less eager to invest in the project: the window of opportunity seems to have become smaller.

By then, the Master Plan had become much more specific. The building site was narrowed down (in the *PlanMER*, and *BesluitMER*; official EIA-documents of late 2008 and 2009; Province of Overijssel, 2009), and was projected North along the bypass. On that site, some parcels were bought by investors, but not many. At this stage, governmental purchases intensified, in spite of the criticism growing (Figure 3 Panel D; February 2010 and Figure 3 Panel E, February 2011). Both the municipality (light green), the province (soft yellow) and a state organisation called BBL (bright yellow), that buys strategic reserves of land for agricultural enhancement purposes, had bought several parcels of land on the location defined for housing. They even purchase the southern parcel of a speculator (dark grey). Remarkably, the municipality did this at a time when the financial crisis and public contestation made the sale of this building land less and less likely.

Synthesis

We theorise based on these two cases, that landownership and regional designs are mutually dependent. In one case, we observe

that the province initiates the regional designs, whereas in the other case it is the municipality that initiates the regional design. We observe that the public actor who takes the lead in the regional design is also the public actor that becomes public landowner. So when the province initiates the regional design the province will end up as public landowner, whereas when the municipality initiates the regional design it is the municipality that will end up as public landowner. Further, we observe that regional designs include public planner's land.

Discussion

Although typically overlooked in scientific research, it is commonly known that public landownership is a potentially powerful undercurrent in public decision making about land development projects. Real estate involves large investment, potential profits are high and so are the risks. When governments have the monopoly on zoning and assigning building permits, there is an interdependency of firms and governments. Meanwhile, negotiations as well as landownership situations are not very transparent, making citizens unaware of how the private interests of landowners (both public and private) may impact the design and implementation of plans.

When governments themselves purchase land on a project site, the situation becomes even more complex. Although the land is purchased for reasons of obtaining a larger stake, thus becoming better able to serve the public interest, the integrity of decision making can easily be compromised. Governments who actively enter the local land market have a dual interest. They play both a role in passive regulatory control through public planning (being the 'referee'), and in active control through public landownership (being a 'player'). Governments then will have a double role in public design while

being public landowner, being a powerful player in both the communication-cycle and the action cycle (Figure 1).

The ethical question here is: Can governments be true democratic representatives of the public when they are stakeholders in the game in which they are the referees as well? For countries with 'active land policy' Louw signals a blurring between public and private roles (Louw, 2008: 72). Dutch municipal governments perform anticipatory land acquisition, knowing that it will be harder to implement any policy on a site where all land is privately owned than when they hold the ownership of part of the land. Governments therefore anticipate their own designs. These ethical issues arise because governments with active land policies draw themselves into a democratic decision making process in which investments in public landownership has already been done. Depending on the price paid for the land, a governmental decision to acquire parcels means that, depending on the price paid, the government loses the option *not* to develop that site. This, in turn, is an important signal to investors: it *will* be permitted at some point to build here. Meanwhile, the public assumes that they have the democratic right to participate in the decision-making process, unaware of the prematurely eliminated options caused by the financial stakes of their municipality.

The case study on the *Wieringermeer*-design provides a clear example of such a decision making process. The province started buying land long before the public decision-making process was finished. To some extent this was logical since the province wanted to be in before the investors started buying, or it would lose its influence. Yet, pre-investing in a project that the public thinks is up for discussion is inconsistent; it communicates a sense of the definite and the preliminary at the same time. It is yet to be studied how a government deals with this double set of gears. And to what extent the

public was informed or otherwise aware. We argue that the design competition for the Wieringermeer (Case 1) project challenged the democratic decision making process. Each of the designs contained a cluster of housing developments that were assumed to be generating the money to pay for the lake. The province had to choose a winner. At that point, they had an integrity issue, being stakeholders themselves. The province chose the design with the houses situated on, at that time, land already provincially owned. The public landownership reduces the freedom to reconsider original choices. During the process the population of the original town of Wieringen, lying just north of the project, requested that the new homes should be built at a greater distance from the former island and existing villages. That would have meant that the province would not be able to develop the land it had purchased.

The case study on the *IJsseldelta*-design indicates how the public decision making by hearing citizens seems compromised by conflicting interests of municipal landownership. Despite contestation and the decreasing likelihood of the plan being executed, they did make the considerable 2010 and 2011 purchases. This may be a sign of, and a reason for, less responsiveness to criticism. If planning is understood as an activity that tries to take citizens' opinions into serious consideration, this case begs the question of whether a government that itself has become a land developer is still able to listen to the people it is supposed to serve. It is safe to say that for Dutch citizens, it is not always transparent how their landownership interests interfere with the wishes of the community.

The above does not necessarily indicate that these governments were gambling with tax money. We analysed several purchases in the case study areas to see if prices were offered above agricultural value, in which case deciding not to develop would mean a financial loss. The purchases we screened

were just about at agricultural value and were typically made with the stipulation that the buyer would pay a comparable amount of money should there be any land development. This way, risks for the government are minimised.

Conclusions

This paper addresses how governments who actively enter the local land market have a dual interest. They play both a role in passive regulatory control through public planning (being the 'referee'), and in active control through public landownership (being a 'player'). We investigated the dynamics of both private and public landownership in regional designs. How should one understand the interplay between landownership and the regional designs process that precede the formalisation of plans? How do private and public land acquisition interact? To explore this issue, we used information available concerning two regional developments in the Netherlands. These two projects involved regional designs followed by anticipatory land acquisition by private and public agents. For these projects, we reconstructed the transitory dynamics of landownership of parcels.

We found that Dutch governments, mainly province in the case of *Wieringerrandmeer*, and a set of governments at the *IJsseldelta*, did add detail to their plans only after they had secured control through public landownership. The snapshots of both projects showed that investors did not play an important role, probably because the plan was kept broad brush in the phase that they were allowed to buy.

In their attempt to stake a claim to control before private buyers could, governments became a public landowner. The expected cat-and-mouse game of public and private purchases chasing each other was

thereby avoided. The pre-emption right prevented this and disabled speculation by developers before the plans reached the likelihood of coming to fruition and the level of detail that developers need to enter the game. This meant that developers did not bear part of the risk involved in the land development.

Private and public landownership influenced the detailed contents of the plans. Both projects had a period with built-in uncertainty with respect to where exactly the housing development would go. We suspect there was an intentional postponing of detailing of the design so that developers would not know which parcels to buy. Meanwhile, government itself, knowing they were speculating with public funds, and that they had the power to finalise the formal plans to their advantage later on, did dare to purchase, while using pre-emption rights to keep speculation at bay. Once public ownership had been established, the detailed design was formally chosen. The subsequent formally chosen designs were attuned to where governments had succeeded in buying land. When the government had acquired ownership in a location, that typically became part of the regional plan. But when deals could not be finalised on the preferred sites because the original owners were reluctant to sell, the government had to find an alternative site, which could lead to reconsidering its original preference and adjusting the rationale behind the plan. Which of these scenarios applies in these cases cannot be established with certainty.

Research agenda

Our paper touches on the deep drivers of the processes of urbanisation. We argue that land-use dynamics result from the interaction between landowners' investment behaviour and planners' land-use designs decisions. This is not a straightforward position. Modellers of urbanisation tend to

ignore landownership as well as democratic mechanisms. The elegant Cellular Automata models, for instance, that estimate the probability of an area becoming urbanised (Batty et al., 1999), implicitly suggest that only physical (slope, elevation) or spatial-economic (proximity, accessibility, services) factors matter. Some include specific regimes (nature protection), but mostly rather crude. The table that Santé et al. (2010: 118) present in their review of 33 models on dynamics in urban land use clearly reveals the systematic absence of political factors in models. Even Mitsova et al. (2011), in an effort to specifically model the land use effects of a green infrastructure programme, fail to integrate the complexity of landownership and policies in a CA model.

The interplay investigated in this paper posits a research agenda for future research. It proposes seeing designs (that precede plans and regimes) as an actual initial intervention, the effects of which will affect the final plan's contents, in either a self-fulfilling or self-falsifying way. First, we need more longitudinal case studies that juxtapose processes to more clearly reveal interaction between landownership and regional designs. Most studies are static and too limited to measure the interaction over time. Instead of determining the effect of variable A on variable B, we need to demonstrate the ongoing interaction of process A on process B. Magnitudes, causes, and determinants for this interaction should be identified as well as the contextual basis in an international cross-sectional framework. Second, and in line with this, such a case approach needs to be followed up by a more rigorously quantitative approach to formally testing theory and proposed hypotheses, and determine whether the relations found in our cases were circumstantial. This would be a solid foundation for evidence-based urban land-use dynamic theory; yet this, methodologically speaking, would be a daunting effort. Third,

the role of systemic incentives in actor's strategies and the consequent urbanisation processes warrants further investigation. There may be conditions that push local governments or developers into specific strategies. These incentive structures, too, need consideration to understand the true depths of urbanisation processes.

Acknowledgement

The authors owe thanks to the Dutch Cadastre, and Michiel Pellenburg in particular, for providing the land ownership data for our analyses.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Notes

1. Wieringen had been an island until 1924.
2. Legal landownership is registered at the Kadaster, so we do not have information from it concerning informal, verbal, or side letter contractual agreements between (mostly agricultural) owners and buyers. These agreements are typically intentions to transfer ownership of the land if rezoning is actually put into effect.

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