

Institutions and urban development: understanding urban morphological differences between the Netherlands, Flanders and North Rhine-Westphalia

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Abstract

Even though the physical borders have disappeared, one easily notice the border between the Netherlands, Germany and Belgium through differences in the shape and measurements of urban development. Dutch city extensions are considered orderly, large and compact, while for instance urban development in Flanders – the northern, Dutch-speaking part of Belgium - appears to be more haphazard, smaller and dispersed. How can we explain such differences between countries that border each other, and have the same climate - and soil conditions? The seemingly simple answer is: institutions. Unravelling how this works exactly is, however, a much more complex endeavour.

This is the aim of this paper. We want to understand how institutions shape the urban morphology. The city-building behaviour is structured by institutions with regard to urban design, land policy, housing markets and so on. We explore these relationships by comparing three neighbouring regions: the Netherlands, Flanders and North Rhine Westphalia (Germany). The focus is on housing development because the differences seem to be most profound in that segment of spatial development.

This paper addresses particularly the effect of national and regional institutions and not so much of local institutions. Local institutions are important for understanding differences within a country or region and not so much for understanding differences between them.

The conclusion of this paper is that there are many institutions that, in combination with other institutions or for itself, influence the morphology of urban development. In our comparison the morphology of North Rhine Westphalia is a combination of the small scale developments in Flanders and the formal master planning in the Netherlands. This study might help the Dutch in finding ways for more small scale developments and to find ways to develop after during and after the current financial crisis.

1. Introduction

Even though the Schengen treaty has abandoned border control in much of Europe, Dutch, Belgians and foreigners alike easily notice the border between the Netherlands and Belgium through differences in the landscape and in the shape of urban development. Dutch cities are considered orderly and compact, while urban development in Flanders – the northern, Dutch-speaking part of Belgium - appears to be more haphazard and dispersed. How can we explain such differences between countries that border each other, have quite comparable physical and social-economical conditions? The seemingly simple answer is: institutions. Unraveling how this works exactly is, however, a much more complex endeavor.

This is the aim of this paper. We want to understand how institutions shape the urban morphology. Following a social-constructivist ontology (e.g. Giddens, 1984) we start from the premise that institutions are made by agents, whose behavior is subsequently shaped by these institutions. This also counts for city-building behavior; this behavior is structured by institutions with regard to urban design, land policy, housing markets and so on. We explore these relationships by comparing three neighbouring regions: the Netherlands, Flanders and North Rhine-Westphalia (Germany). The focus is on housing development because the differences seem to be most profound in that segment of spatial development.

This paper starts with defining a conceptual framework for comparative institutional analysis of housing development and its relation to morphology. Section 2 explores some key differences in morphology between newly built residential areas in the Netherlands, Flanders and North Rhine-Westphalia. In the core section of this paper, we single out effects of the institutional environment on these morphological differences, clustered around four aspects of the development process: the interplay between municipality and land owners in the initial phases of development; the nature of the involvement of the municipality: as an investor or a facilitator; the organization of the process in time: open-ended or project-based; and the involvement of small investors like private persons. The paper concludes with a some remarks on the importance of both institutional and morphological analysis in understanding housing development, and with some suggestions for further research.

2. Conceptual framework for comparison

In this section, we develop a conceptual framework that enables to describe the relationship between morphological phenomena, on the one hand, and the institutional environment in a particular country, on the other. For this, we need 'intermediate' variables that describe the characteristics of the development *process* that can be linked to both morphological and institutional characteristics (section 2.2).

The morphology of a residential area comes about through the interaction of different stakeholders (project development companies, municipalities, land owners etc.). They all have their interests, and different abilities to influence the outcome.

Institutions are the rules (formal or informal) that coordinate or structure the interaction of these actors (Needham 2010). (Cf. section 2.1.)

Figure 1 shows schematically the relationships between three variables being explored in this paper: *institutions* shape the conditions for actor interaction in the *process* of development, and characteristics of the process influence the *morphology* that results from it.

Other factors may be important determinants of the development process or the morphology as well. Regional *market circumstances* on the housing or land market set the conditions of development processes. At the same time, these market conditions may themselves be a result of the institutional environment (or changes in this) that create shortage or otherwise structure the market (Jokovi et al 2006, Besseling et al 2008, Ball 2003, 2006).

Of course, morphology of residential areas is also determined by *design conditions* of different types: for example local physical conditions or the 'taste' that rules the imagination of potential buyers, but also more 'institutional' conditions like esthetic municipal regulations. In this paper, these are only taken as context factors, they are not it's prime research object. It focuses on morphology in as far as it is a product of development *processes*, and not as product of *design*.

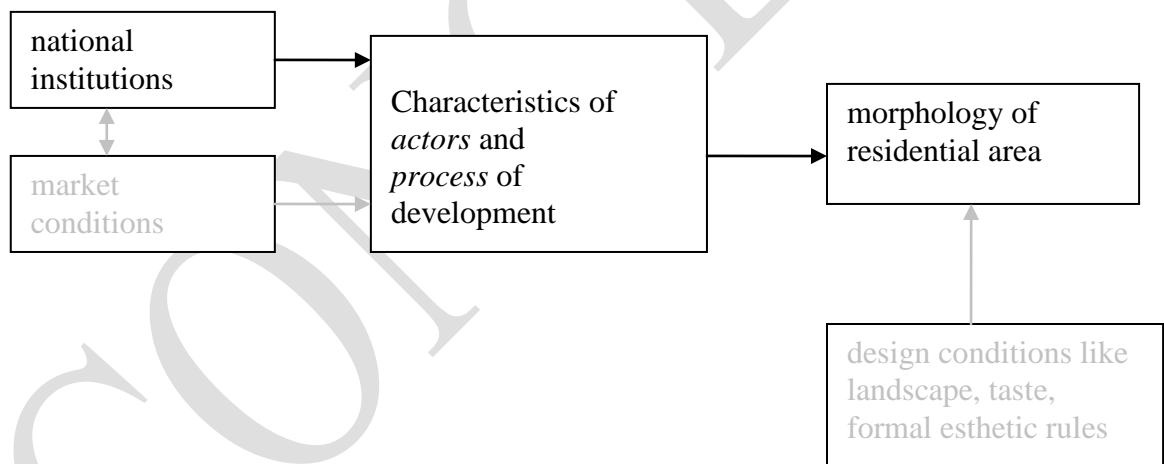


figure 2.1: main variables in this research

2.1 Institutions

Many actors are involved in housing developments. Their interaction is coordinated by formal rules (under private or public law), as well as by practices they are used to, and by the expectations they have (Needham 2010) expectations of one another, of the course of the process, and of the kind of outcome. These latter are all more informal 'rules', that nevertheless may be crystal clear to all participants. Ostrom (1999) defines institutions as all the 'rules-in-use' in a particular 'action arena'. They shape actors' possibilities in trying to reach their goals within the arena. But institutions may also structure the actors preferences that underlie their goals.

The 'action arenas' that are relevant to housing development are three 'markets': land assembly and development, house building, and house sales (Ball 2003). These are present in every country, overlapping totally in one country and more independent in another. They are always linked, in that the outcome of one process can be leading for the next, and calculations about next process may structure the first. Institutions may be relevant for every market, or for just one of three.

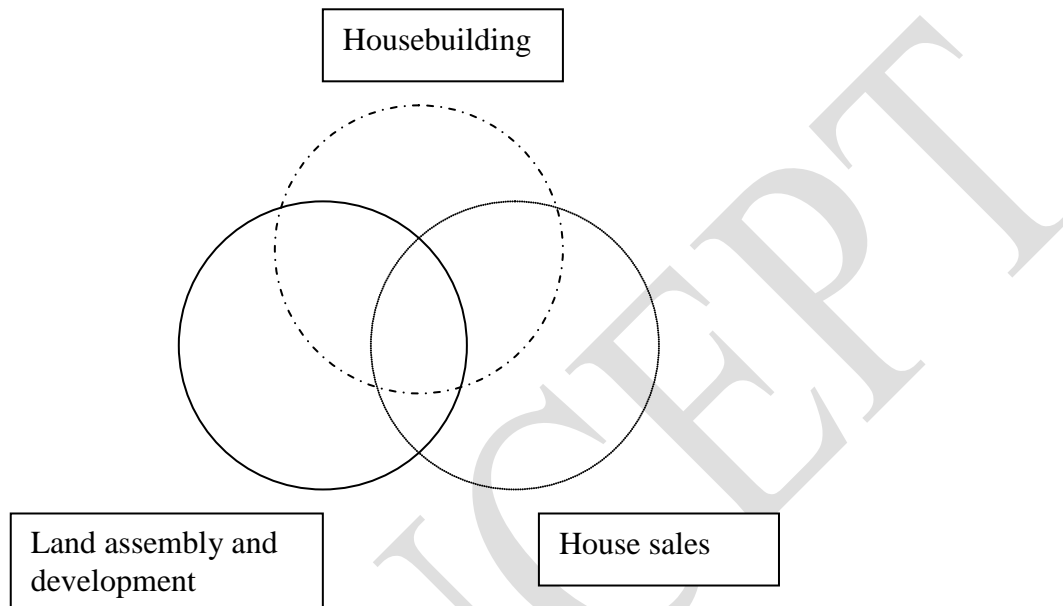


figure 2.2: structure of housing provision (Ball 2003)

Together, the kind of participating actors and their preferences, the action arenas in which they interact (by negotiating, by demand and supply), and the institutions that coordinate this interaction, are the structure of housing provision (Ball 2003) of a particular country, that constitutes the 'environment' for any particular housing development processes. Institutions for land assembly and development are for example rules that define rights of ownership, land zoning, compulsory purchase or the provision and financing of infrastructure. For house building, one can think of rules that regulate the supply of social housing, or rules that define the role of the architect vis-à-vis a client. For house sales, one can think of mortgage conditions, or rules of tenure that make it interesting to invest in private renting houses or not.

2.2 Characteristics of actor and process of housing development

Institutions structure the interaction of actors in the process of housing development, by enabling and constraining their actions (Giddens 1984) In this paper, we are interested in three type of effects on the course of the process that we expect to have an impact on important aspects of morphology. The first two effects have to do with the actors involved in the process, the second with the time-span of the project.

First, how do institutions influence who has access to the development process and who has not? For what type of actors the rules-in-use are favorable, for what type of actors not? For example: can private persons enter the process as developer, or can only professional development companies participate? Are there many actors involved, or only few?

The preferences of these actors in this paper are not treated as given. The second relevant effect is therefore: how do institutions influence the way actors that are involved see their interest in the process? For example: does the municipality has an interest in the process as an developer (under private law) or only as an public body under public law?

Third, how do institutions influence the time span of the process? For example: are participants necessitated to finish the development process within a given time horizon, or not?

The number and type of actors involved or left out, their interests in the development process, and the time span of completion, all have their bearing on some crucial morphological differences between the three countries, that are discussed in the next section.

CONCEPT

3. Key morphological differences

The morphological analysis in this paper is limited to greenfield developments in urban agglomerations. This means that we do not consider brownfields and urban renewal, and also leave rural areas and villages out of consideration. For the morphological analysis we differentiate between three scales: the city and its agglomeration, the development area (the site), and the street.

At the scale of *the city and its agglomeration*, in the Netherlands we see large city extensions next to the existing city. Usually there is only one site under construction. In Flanders we see, besides the notorious 'ribbon development', a lot of small developments woven into the existing loose urban fabric; In North Rhine Westphalia one sees several sites of intermediate size simultaneously under construction next to the city.

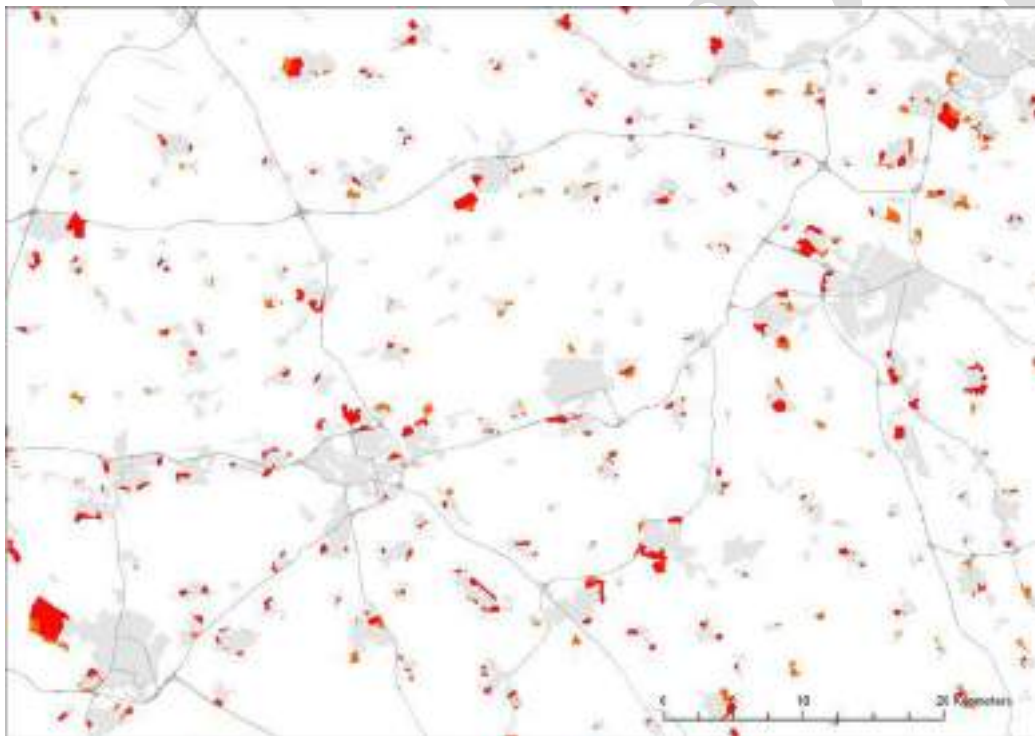


figure 3.1 urban extensions (housing) between 1990-2000 (in red) and 2000- 2006 (in orange),North Brabant region between Tilburg and Den Bosch.

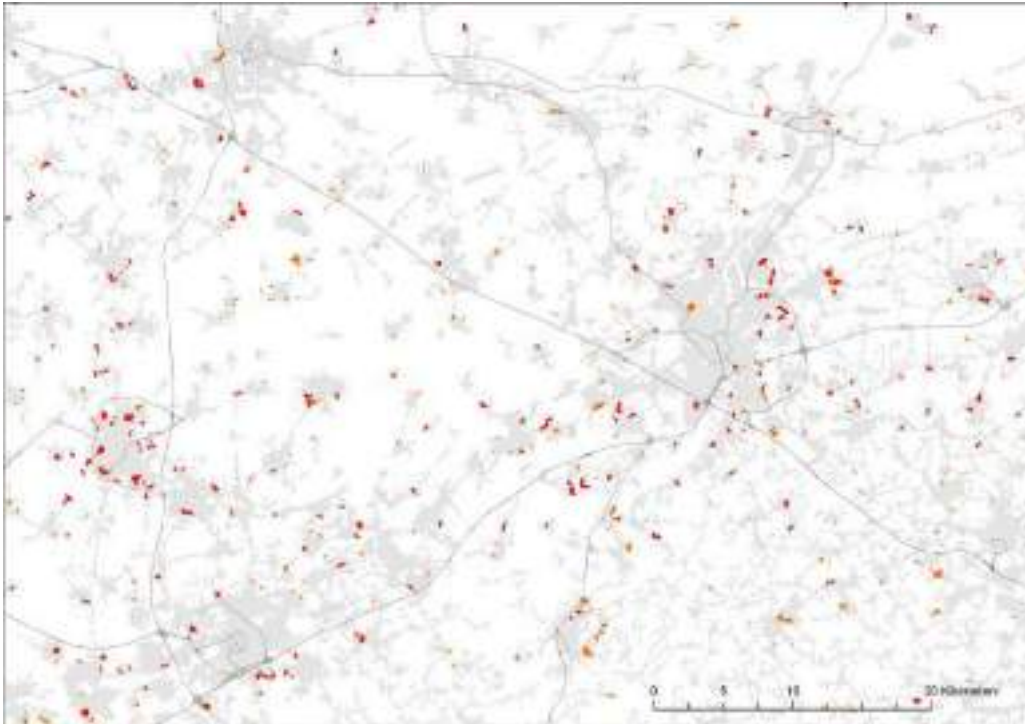


figure 3.2 urban extensions between 1990-2000 and 2000 and 2006 respectively, Gent region between Gent, Kortrijk and Brugge

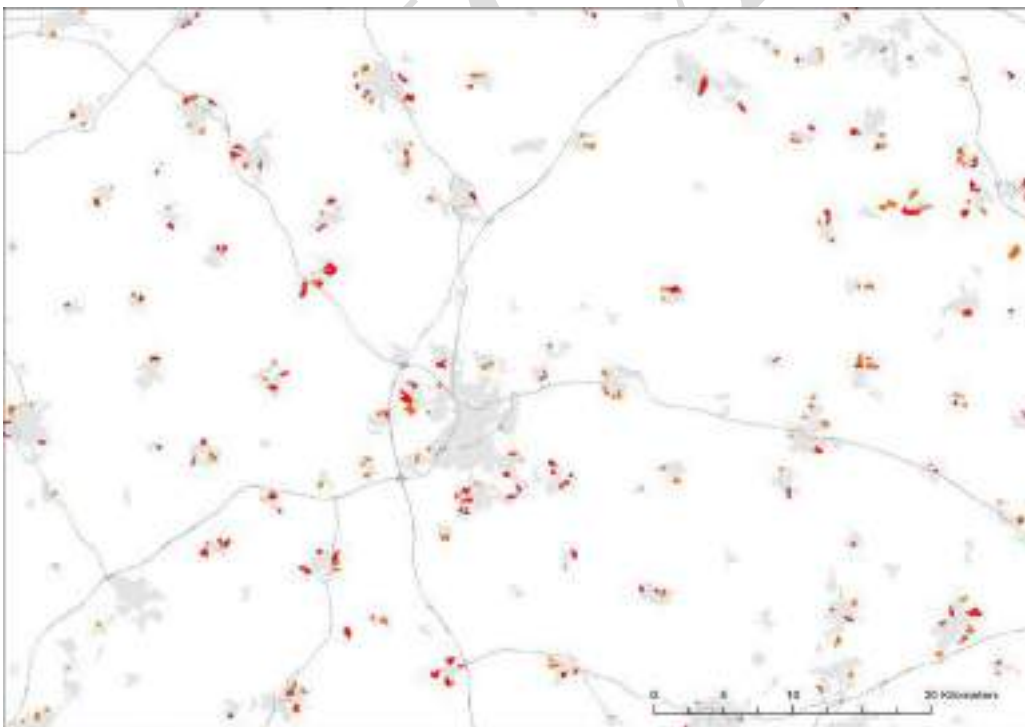


figure 3.3 urban extensions between 1990-2000 and 2000 and 2006 respectively, Munster region

At the scale of *the construction area*, one notices that the large new-development sites in the Netherlands are sub-divided into many neighbourhoods that all have their own theme and atmosphere. The Dutch urban extensions and its neighborhoods are part of a formal master plan in which a hierarchical traffic scheme, clustered facilities and 'geometric' street patterns are very easy to indicate. The small Flemish developments, usually around 10 to 20 dwellings along a dead end street, links to the existing infrastructure. The lay out of the developments in North Rhine Westphalia is more similar to the ones in the Netherlands but much smaller in size.

CONCEPT

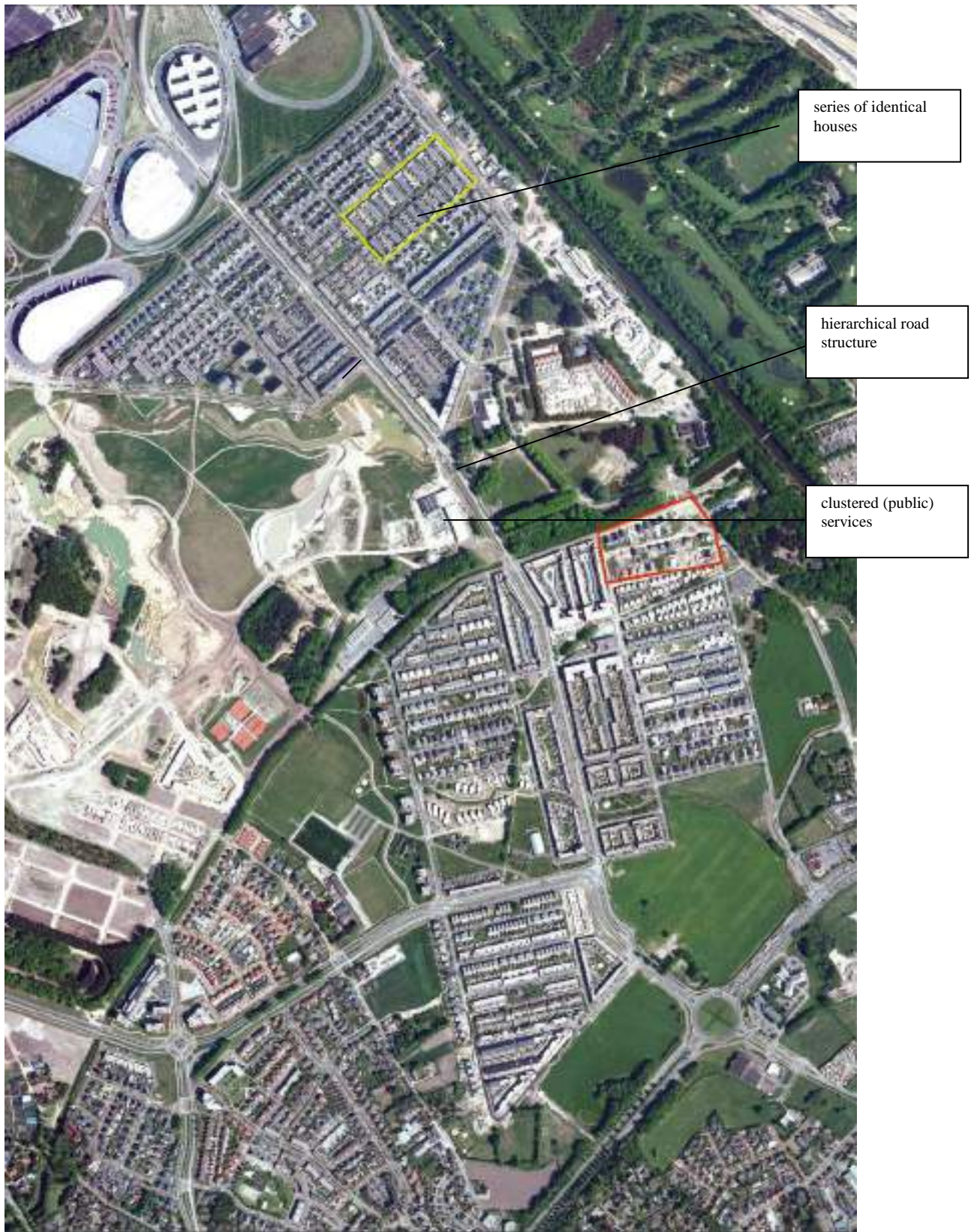


Figure 3.4 Typical morphology of city extension Eurosense BV 2008

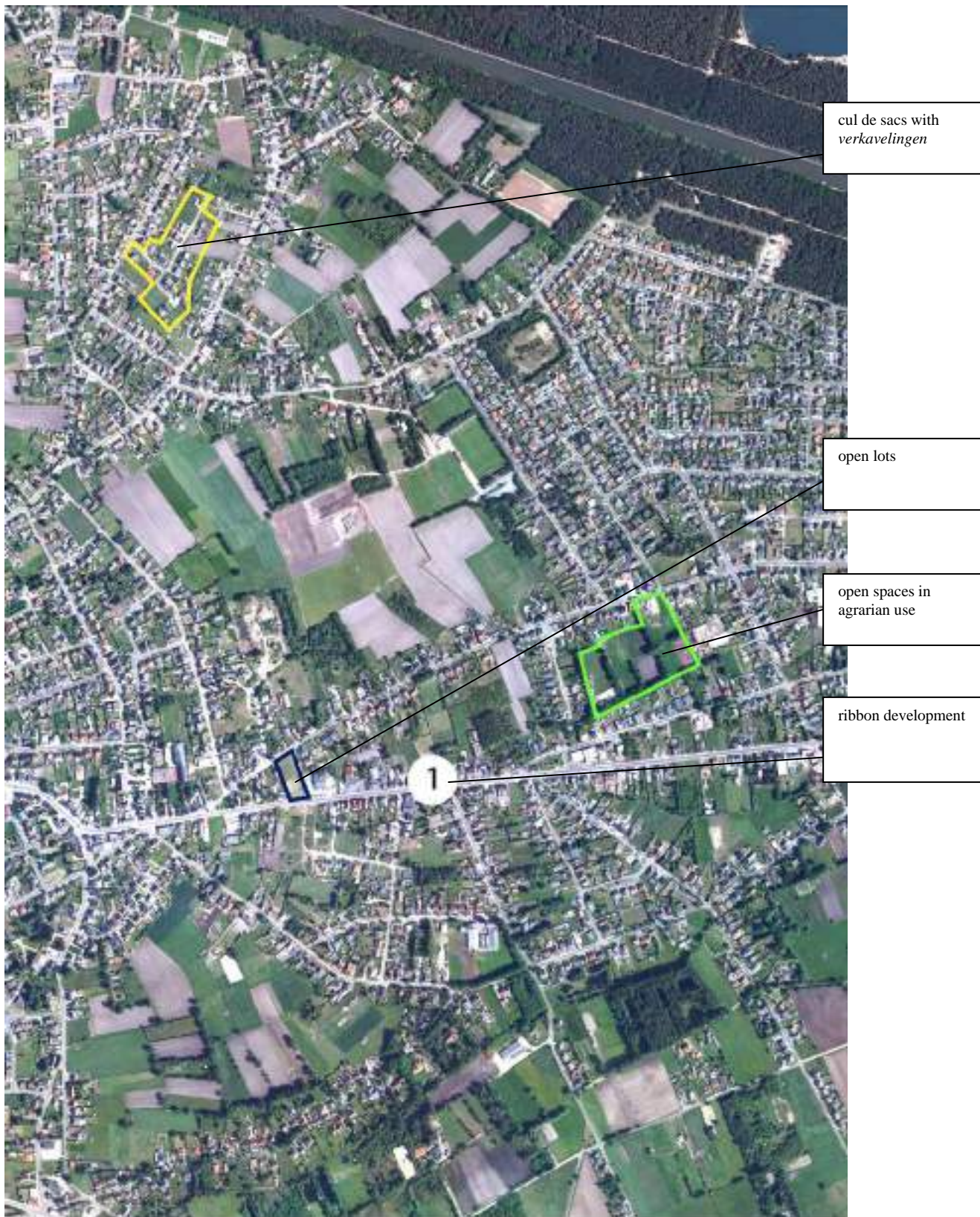


Figure 3.5 Typical Flemish morphology Eurosense BV 2008



new housing
development

both series and
detached housing

Figure 3.6 Typical German morphology of city extension Eurosense BV 2008

At *street level* we notice large differences in variation: The Dutch streets look very homogeneous; dwellings in one street, with usually terraced houses and some apartment buildings, are visibly constructed at one time, and have the same building style. Sometimes up to four parallel street are part of the same series. In North Rhine Westphalia we see not only see terraced houses in small series but also a majority of detached houses. Most of the houses in Flanders are privately developed detached housing, but during the last years there has been a tendency towards bigger series.

The result is a low visual variety at street level in the Netherlands. In Flanders and North Rhine Westphalia we see a higher variety at street level.

CONCEPT



Figure 3.7 typical streets in new housing developments in Flanders, North Rhine-Westphalia and the Netherlands

4 How institutions structure processes and morphology

In this section, the influence of institutions on the typical morphological characteristics discussed in section 2 is illustrated by means of four aspects in which housing development differ between countries: 1. the interplay between municipality and land owners in the initial phases of development; 2. the nature of the involvement of the municipality: as an investor or a facilitator; 3. the organization of the process in time: open-ended or project-based; and 4. the involvement of small investors like private persons. The first two practices are of interest for the morphology (size, structure) at regional and construction site level, the third and fourth for variation at street level.

It is clear that none of these practices of housing development in themselves can explain the resulting morphology. Not only there are important non-institutional factors (section 2), but each practice in itself does not cover all the institutions relevant for the morphology, either. Only together they should give a more or less complete picture of the institutional differences that are the most relevant for the morphology.

4.1. regulating urbanization: the interaction between municipality and land owners

In the Netherlands, urban development is very much a product of planning by the local government. It is the municipality that takes the initiative by preparing a change in the zoning plan, designating new residential areas. In order to develop a site the municipality cooperates with a limited set of large participants: property development companies, housing associations and large investors (e.g. pension funds). In most of the post-war period, the municipalities were in control of this process almost alone. They bought the land from first owners like farmers, developed the land and provided the infrastructure, then sold it to cooperating partners. Since the 1990s, municipalities lost the position to decide alone in this process. Increasingly, project development companies and other investors anticipated on municipal changes in land zoning, acquired strategic land positions in order to 'buy themselves into' the process of housing development (Segeren 2007). Still, the zoning competency gives the municipality the monopoly in starting the initiative, changing the zoning plan is its trump card in the negotiations with the developing actors.

For the private sector these investments were interesting because they could count on some very strong constants in post-war government policy: the objective to guarantee a housing production that matched quantitative and qualitative demand - as predicted by scientific housing demand studies predictions (*woningbouwopgave*) -; and the core policy belief (Sabatier 1993) in integrative and comprehensive planning as the only way to channel the rapid urbanization process, already dating from the end of the 19th century but reinforced by high population growth after WWII. De Klerk (2008) dates this ambition for integrative urban development back to the early 1900s: Since then, the municipality wanted to "bring all aspects, sectors and parts of the city into coherence and a logical hierarchy of interests: the urban traffic system, regional transport system, public health, city building, housing, preservation and creation of townscapes, parks, public gardens and recreation for inhabitants, all

grounded on a financially sound estimation of land development." (p. 270). In the post-war period this belief found its expression in two leading principles in housing policy, the already mentioned 'woningbouwopgave' and the so called 'neighborhood principle': a residential area should be set up as a new, social entity in itself: it is not enough to build new houses and to provide the necessary infrastructure, but the new residential areas should be planned so that they contain all the necessary amenities for the population in its diversity: old and young, richer and poorer, catholic, protestant and socialist (Van der Cammen & De Klerk 2004): schools, recreation, churches, public transport, retail, and recreation all should be present and adjusted to a hierarchical relationship to the town centre. Although in the nineties this 'neighborhood principle' was considered old fashioned in some of its idealistic 'society engineering aspects, the thrust of its ambition of integrality is still alive in related concepts like 'integrated area development' (*gebiedsontwikkeling*).

Both policy beliefs: the belief that government should guarantee the provision of enough housing, and integral planning, contributed to a preference of municipalities for concentrating housing development on sites of considerable size next to the city: only big developing sites could provide the basis for the necessary amenities, and on large development sites it is possible to design relatively independently from the existing fabric of the city a rational road structure and new amenity clusters. At these large sites, large project development companies have an advantage over small ones, in that they can most take advantage of the economies of scale in land development, house building and financing (De Klerk 2008), and reduce the risk for municipalities that its policy objectives are not being met.

The housing process in the neighboring Flanders differs drastically from this practice. There, the initiative to develop new houses on greenfield sites is taken not so much by the municipality as by the land owner. Since the creation of the regional spatial plans at the end of the 1970s, there has been an excess of land zoned for residential use (De Decker 2011, Loris 2011), although it may still be in agrarian or other use. Therefore, not the moment of decision by the municipality to change the zoning plan is the start of housing development¹, but the decision of individual land owner to develop the land himself or to sell it to an allotment company ('*verkavelaar*'), who develops only the land and sell the plots, or develops the houses as well like a project development company. The excess of land zoned for residential use has a long history. Unlike the policy in the Netherlands of channeling, concentrating and integrating urbanization, the Belgian urban development is historically directed to the goal of private ownership of single family dwellings on the countryside. Only in the 1960s, planning by zoning instruments began to develop in Flanders. In the absence of a binding regional plan, in the beginning municipalities used these instruments to maximize possibilities for urbanization within their borders. When finally at the end of the seventies the regional planning documents in Flanders were drawn up, the necessity to incorporate these areas was one of the

¹ Although this may happen, in for example the 'woonuitbreidingsgebieden', originally meant for affordable and social housing but often not used because of the small importance of the social sector in Flanders. Here, the government holds the 'key' to development by turning it into a normal residential area ('*woongebied*') in the land zoning plan..

reasons of the excess of residential zoned land. The recent Flemish policy objective from the Flemish Spatial Master plan (Ruimtelijk Structuurplan Vlaanderen) of 1998 to try to concentrate urbanization is therefore severely hampered by the reservoir of land that judicially is already zoned for housing. Therefore, although the allotment company who is able to buy a plot of unserviced land is obliged to apply for permission, his permit cannot be refused when he services and sets up the land according to municipal guide lines and conditions. The same goes for the private person that takes the decision to develop his own plot alongside existing roads.

This practice has led to the kind of morphology of urbanization, as showed in section 3, where urban development grows both along existing roads, and in the form of new small housing projects ('*verkavelingen*') that are being built in between, and connected to, existing roads. In comparison with the Dutch urbanization, it is a rather 'chaotic', patchwork- like pattern. New building sites pop up within this existing pattern or as an extension of it. Much more than in the Netherlands location and size of a house building site are determined by coincidence: An allotment company may be able to buy a piece of land, or a private owners may decide to leave it empty.

Designating house building sites in North Rhine-Westphalia resembles much more the Dutch than the Flemish way. Like in the Netherlands, the municipality's choice to change the land zoning plan is the key for starting the development process. Although municipalities have to take into account the higher regional plans, the bigger cities are rather free to designate residential building sites in their *Flächennutzungsplan*, a more strategic plan which is used to channel urbanization, and *Bebauungsplan*, the document that is juridical binding for citizens and developers. Although these plans - like in the Netherlands - are the expression of the municipal urban development strategy, the building sites are more dispersed and of much smaller dimensions.

What is the reason for this? Of course, population growth in the last decennia has been much less in North Rhine-Westphalia than in the Netherlands, but the dispersed character of urban development does not necessarily make the total amount of houses built much smaller than in the Netherlands.²

A striking difference, however, is the philosophy of the adjustment of new housing projects to existing amenities. Whereas in the Netherlands new amenities and houses are planned together at one and the same time, we found in our case study in North Rhine-Westphalia what we call the practice of 'amenity-directed planning'. In planning a new housing site, the municipality tries to avoid that the new site overburdens existing public services like schools or kindergartens, which would make the opening of new services necessary. As these services, are not being financed by the value capturing of the land of the building site as is the case in the Netherlands (cf. section 4.3), in this practice there is often little incentive to increase the dimensions of the site. Without claiming that this is the single reason for the comparatively small dimensions of the housing sites, 'amenity-directed planning' fits

² For example, the municipality of Münster, one of the case studies in our research, in the last two decennia had a housing production that was comparable to that of Dutch cities.

well within the practice of dispersing housing development instead of concentrating it.

When the land is zoned as residential area, the municipality can start a parcel readjustment procedures (*Umlegung*), in which the land is serviced and new parcels given back to the land owners (deducted the costs of the land servicing and recoup of the value increase due to servicing). In an alternative procedure, that of the *vorhabenbezogener Bebauungsplan*, it is the land owner that takes the initiative. After drawing up a contract with the municipality, he services the land according to conditions of the municipality, hands over the public grounds, and only after this the municipality makes the changes in the land zoning plan become definitive.

So, in this the initial phases of the housing development process, the land assembly and land servicing, the cooperation between land owners and the municipality is quite different in the Netherlands, Flanders and North Rhine-Westphalia.

Dutch municipalities tend to cooperate with a limited group of big project development companies, housing corporations and investors in order to realize an integrated municipal plan of relatively large dimensions. It is important to notice the two sides of this cooperation. On the one hand, Dutch municipalities often *cannot avoid* cooperating with these large companies and organizations. Their land ownership gives them development rights. As long as land owners are prepared to realize the plan as designated in the land zoning plan, municipality has to cooperate with them. There are different models of cooperation. In some the land owners sell their land to a low prize to the municipality, who services the land and sells it back to an agreed prize, and the private party develops the houses and sells them. In others, municipalities and private sector companies together establish a private company that develops both the land and the houses (PPP).

But not only municipalities cannot always avoid to cooperate with private sector companies, at the same time municipalities are often inclined to remove small land owners, like private persons, from the development process. In the most extreme case, Dutch municipalities informally ask project development companies to buy land in an area of future housing development. But also in less 'normatively questionable' practices, municipalities use their pre-emption right to buy out land owners, or eventually threaten to use compulsory purchase. As a consequence, in the development of the large housing sites, there is seldom an important part to play for private persons land owners as co-developer. These are actors, that cannot contribute to economies of scale. Moreover, they could frustrate the timely realization of the development (section 4.3) as well as obstruct the desired, so-called property-neutral development of the site.

Property-neutral development designates the process, in which realization of a well-designed, integral plan for a housing location is not hampered by existing property structures. It is a *tabula rasa* method: existing structures and landscape elements are removed, and a totally structure is being made. Although the urban designer has the freedom to hint at landscape elements present at the location before - a country road with old trees, an old building, the landing strip of a former regional airport - he is not forced to do so by the wishes of the land owners.

By buying out the remaining small land owners, actors with possibly an emotional relationship to their particular property, who have no interest in economies of scale, are removed from the process. This turns an important switch in the process that determines size and structure of the site.

In contrast, in Flanders small land owners are the drivers of the urbanization process. Housing development in Flanders takes place through all the numerous initiatives of small to middle sized land owners who start to build themselves, or sell their land to (relatively small scale) allotment companies or project development companies. The important role of small land owners is understandable, as traditionally Flemish municipalities have much less integrative ambitions than their Dutch counterparts. Property-neutral development is not necessary.

The comparison with North Rhine-Westphalia is more interesting in this case, as municipalities do foster these ambitions. Nevertheless, German municipalities seem more indifferent to the size of the land owner, and treat both large and small land owners as possible housing developers. Institutional differences - the availability of policy instruments - between the Netherlands and Germany can shed some light on the reasons.

In North Rhine-Westphalia municipalities have at their disposal the instrument of land readjustment (*Umlegung*). At the same time, it is comparatively difficult - almost impossible - to expropriate land owners for housing purposes. So, municipalities can only force land owners into cooperation by also granting them some voice, that is, in the readjustment process where they might have their special wishes, and accepting them as potential developers.³

In the Netherlands, compulsory purchase of the land of private persons for housing development is juridical a realistic possibility, although it may have a very high prize. Dutch municipalities, however, do not have the option to force land owners into cooperation to development without paying them a lot of money, like the *Umlegung*. Therefore, when they want to realize their integral plan in a property-neutral way, they have to offer private land owners large sums of money- for which reason private person land owners often aim at expropriation by withdrawing their cooperation of the municipal plans.

In this way, the availability of land policy instruments is one of the factors that preserve the national differences in the municipal attitudes towards small land owners, and their participation in the housing development process.

4.2. active or facilitating land policy of municipalities

In the Netherlands, in most cases the municipality is itself one of the land owners, and it traditionally participates in the development process under private law (De Klerk 2008), by means of a municipal land development company, besides its public roles. Until the 1990s, municipalities often acquired themselves most of the land necessary for development from the first land owners. When this was not possible anymore, the new models of cooperation with professional developing land owners

³ Especially in the 'voluntary' variant (*freiwillige Umlegung*).

emerged that are described above. In these cooperation models, municipality still is (co-)owner of all the land at the moment of land servicing, and sells it afterward to developing parties. Municipalities used to set land prices according to the real costs, but from the beginning of the 1990s a covenant between Dutch government and the private sector determined that land values had to be calculated according to the residual method, which enabled municipalities to share in the value increases in a favorable house market. In Flanders as well as North Rhine-Westphalia, municipalities act less often as land owners on greenfield locations. Flemish municipalities normally acquire only small parcels for public amenities or to enable or unlock greater development. In North Rhine-Westphalia it used to be common for municipalities to buy land for urban development in general, but nowadays, there is relatively little land acquisition, and mostly for social or affordable housing.

The Dutch municipal practice of actively acquiring land in order to make housing development possible, has its effects on the morphology of the site in that it strengthens the role of the municipality as one of the developing actors, instead of its role as regulator of the market. The municipality becomes one of the interested parties for economies of scale and timely realization of the site (section 4.3).

This practice is rooted in a double motivation for municipalities. First, land ownership gives control over planning content and process. Parceling out and servicing the land is one of the best ways to guarantee the integrated character and overall quality of the site. Moreover, land ownership used to be the best way to guarantee an ambitious percentage of social housing of 30%. And the freedom to set the prizes made it possible to recoup costs of land development, as well as to stimulate social housing. All these reasons of 'planning content' were repaired only in 2008 by a new land policy law (*grondexploitatiewet*), that made them possible without active land policy. As we shall see (section 4.3) in Flanders and North Rhine-Westphalia municipalities have other solutions for these problems.

Moreover, ownership of the land also gives control over the process: it means the freedom to choose private sector companies that participate in the development, although this was undermined by the increase of land positions of project development companies (Segeren 2007), and by jurisprudence of European Competition directive (Buitelaar 2011).

Second, next to reasons of control, there are reasons of financial gain. Municipal land ownership is a means for Dutch municipalities to share in the value increase of the land - both as a result of zoning changes and of servicing - that would otherwise accrue to private companies only. In Flanders and North Rhine-Westphalia, it is indeed the private sector that does (partly) profits from these value increases. For what reason Flemish and German municipalities do not aspire to the role of land ownership, as land prices in prosperous municipalities as our case studies Munster and Gent have been rising and municipalities have the possibility to get their share?

An important factor explaining these differences is to be found in the differences between the systems of municipal financing in the three countries. As shown in figure 4.1,

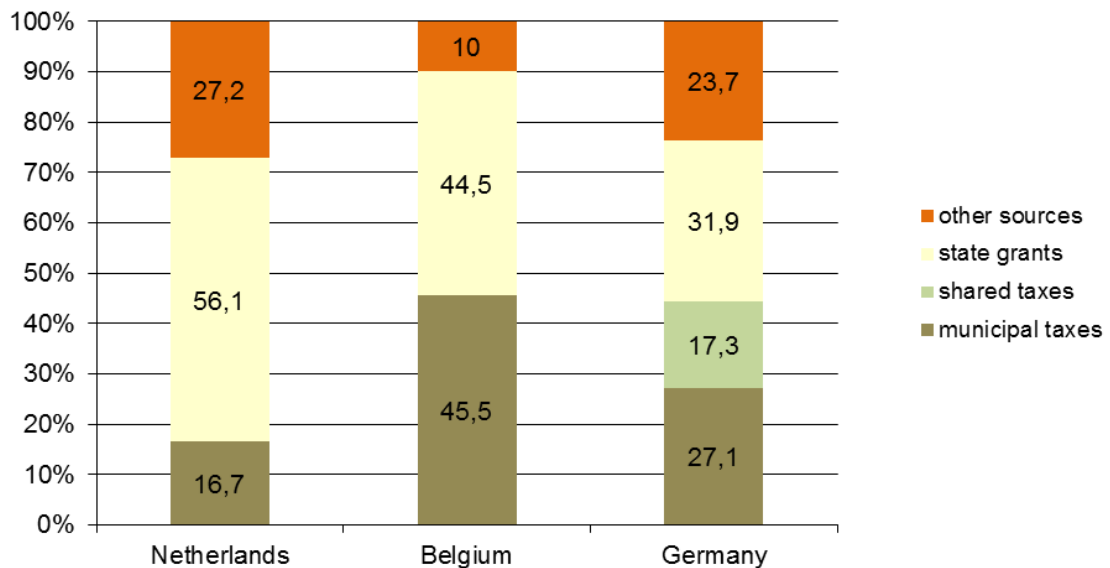


figure 4.1: income of municipalities in the Netherlands, Belgium and Germany (loans not included) in 2006. Hoorens 2008.

a relatively small share of Dutch municipal income derives from municipal taxes. Belgian and German municipalities dispose of more own taxes, the rate of which they can set themselves (within limits). A smaller proportion of their income derives from state grants.

The dependency on state grants decreases the leeway for Dutch municipalities to set its own policy priorities. Although not all state grants are earmarked, their size is fairly precisely calculated on the basis of the normal, necessary and statutory municipal expenses (e.g. social security grants). Local lobby groups monitor whether municipal expenses are according to the grants.

Besides, municipal income from the most important municipal tax on real estate property (OZB) is being leveled in the state grants: a higher capacity for municipalities to extract revenues from this tax means a lower state grant. This leaves municipalities little financial freedom for 'extra', non-statutory projects and ambitions. Therefore, Dutch municipalities have tried to find extra funds by participating in land development, in order to take advantage of favorable real estate market conditions. Although average profits for all municipalities were not very high, and although it is not a secure income source, each individual municipality could decide to try to imitate its most successful neighbors, and take the risk. Indeed, in average municipalities managed to increase their revenues from land development (Korthals Altes 2008) until the financial crises.

Municipal income from land ownership is negligible in Flanders and North Rhine-Westphalia.⁴ Interestingly enough, in Flanders and North Rhine-Westphalia housing development is seen as a method to increase municipal income as well (cf. ILS 2006 for North Rhine-Westphalia). But there, extra revenues are a consequence of an increase in the amount of (high income) citizens⁵, and, in North Rhine-Westphalia, an increase in the area of (serviced) land. The important difference with the Dutch system is, therefore, that municipalities in Flanders and North Rhine-Westphalia do not have to acquire land themselves and to bear financial risk in participating in the development in order to increase their revenues.

4.3. *project approach vs. open-end process*

In the last two sections, we have discussed some institutions that shape the conditions what type of actor participates in housing development. Who has access and who does not? In this section, we focus on differences with regard to the time span of the development process.

Comparing the Netherlands with Flanders and North Rhine-Westphalia, it is striking that the Dutch development process of greenfield locations is organized as a *project*: not only are all different functional parts adjusted to one another by integrative design (section 4.1), they are being realized within a limited *time period* as well. The development process has a time horizon, within which the 'project' of building a new residential area will be finished.⁶

In contrast, many of the greenfield housing development sites in Flanders and North Rhine-Westphalia are being developed in a process with an *open end*. In de 'verkavelingen' in Flanders parcels may remain unbuilt for decades. Owners consider them as an investment for later, or reserve them for their children. These plots also may never be built on, for example when the owners keeps it as a permanent extension of his garden. In North Rhine-Westphalia, too, it may last a very long time before all houses are realized. In Münster, the municipality kept a list of all sites where free parcels were available, some of which dated as far back as the early 1990s! These differences in organization lead to a difference in the variation (at street level) of the sites. In the Netherlands, all houses are being built in the same time period. Therefore, apart from variation or homogeneity *by design*, all buildings underlie the trend with regard to architecture and dwelling type that was fashionable in the time of building. Moreover, in Dutch residential areas, one does not find empty parcels, nor parcels that are included to the garden of their neighbor: all parcels of a block or street have the same size.

Differences in the institutional environment set some important conditions for this different organization of the housing development process. Two aspects of the

⁴ Percentage in Flanders unknown, but municipal land ownership on greenfield locations is practically absent (source: interview). In NRW income from land ownership was only small part of the 1,5% 'selling of property' in 2008 (source: ILS).

⁵ although at least in Germany there is a leveling mechanism with state grants like in the Netherlands. The Dutch system, however, is the most radical in this (Allers 2005).

⁶ For this purpose, the development of a housing site is often managed by a separate project-organization, sometimes in joint-venture with project development companies. This reinforces the project-like character of the housing development, as the organizational mission of the project group is to finish the project in time.

time span of realization have to be distinguished here. On the one hand, participating developing actors have an interest that the development is realized within a *short period*. As the land acquisition has to be pre-financed, every year that the land is not being built on, means loss on interests. The difference between the Netherlands and its neighbors is that Dutch municipalities participate in the process as private land owner and share the necessity to finish the project as quickly as possible with the private sector investors (section 4.2). Besides, municipalities as a public body are confronted with policy housing targets from the regional inter-administrative housing agreements (*woningbouwafspraken*). What is more, in the Vinex-period (1995-2005) central government subsidies for housing development were tied up to the time schedule of the subsidy scheme.

But the second aspect of the time span of realization is just as important. Housing development has a project-like organization not only because a quick realization is important, but more general because of the necessity of a more or less *simultaneous realization* of the houses. This has to do with financial settlement agreements between participating developing actors. These agreements serve a wide scope of different purposes: to spread evenly large pre-investments, to finance part of the unprofitable part of social housing, to share market risks in the housing sector, to finance a part of amenities, to compensate for unequal development possibilities in different parts of the site, all these are reasons for a comprehensive and often complicated contract between the participating actors (including the municipality) on the financial settlement of the project. These kind of agreements require a moment in time to make the clearance, to close the bill - for example at the moment when all participants have had their revenues. As the revenues on which the agreement was based only materialize at the moment of house sales, an open-end-process like in Flanders or North Rhine-Westphalia is no option in the Netherlands.⁷

In Flanders and North Rhine-Westphalia, these financial settlements agreements that financially link the realization of different parts of the site to one another are less frequent. In both countries, the size of the housing development is comparatively small, which diminishes the possibilities for settlement within the site itself: there would not be enough 'mass' to finance non-profitable elements. Therefore, some elements at the site like amenities that in the Netherlands would be co-financed by other, profitable elements, are being financed separately by other means, for example the municipal budget. They do not depend on the realization of other elements of the site. In both Flanders and North Rhine-Westphalia, however, some mechanisms that fulfill some the functions of the Dutch settlement practice do exist, but they put less pressure on in-time realization.

In Flanders, the allotment company or project development company has to acquire a permission in order to parcel out and service the land (*verkavelingsvergunning*). The permission contains a detailed description on the infrastructure, set-up of public space, type of buildings, use of materials etc. After the servicing has been done, the *verkavelaars* hand over the public grounds to the municipality for free. But the permission can also contain extra demands by the municipality, the expenses. In the 'larger' sites (more than ten houses) these expenses

⁷ Besides: these kind of financial settlement are favourable for large sites, as this increases the possibilities for settlement, also with small margins.

minimally require to realize some social parcels or social housing. Thus, although there is no financial settlement between different participating actors, nevertheless the allotment company/ project development company has to compensate internally the losses on one part with gains on the other.⁸

A similar case is the German procedure of the '*vorhabenbezogener Bebauungsplan*', a special form of changing the land zoning plan. In this procedure, it is not the municipality that provides the infrastructure and other amenities, as is normally the case, but the private developer himself. Like in Flanders, the private developer hands over all public grounds afterwards to the municipality for free.

Both in Flanders and in North Rhine-Westphalia, a quick successful sale of the houses may therefore be as important for the private project development companies as it is in the Netherlands. But different from the Netherlands, the municipality in these situations is not involved financially. From a financial point of view, it can allow itself to approach the housing development as an open end process.

In the 'normal' procedure of public infrastructure provision in North Rhine-Westphalia, however, the municipality is financially involved in the development project, in that it builds and pre-finances the public infrastructure. With the procedure of the *Erschliessungskostenbeitrag*, a municipality can recoup 90% of these costs. The difference with the Dutch case is here, that the *Erschliessungskostenbeitrag* is paid by the land owners irrespective whether they have already developed the real estate. Whereas in the comparable procedure in the Netherlands (*grondexploitatieplan*) the municipality can recover costs only at the moment when the land owners have realized their real estate revenues.

In short, in all three countries a long time period in which housing or other real estate is not yet realized, constitutes a financial a financial risk. But in Flanders and North Rhine-Westphalia, this risk is borne by the private sector, not by the municipality.

4.4. *the involvement of small investors*

In the Dutch practice of large scale housing development, not only there is little room for participation of private person land owners (section 4.1), but also at later stages in the process small investors normally do not play an active, independent role. In Flanders and North Rhine-Westphalia, functioning markets for ready-for-building parcels exists for private persons or small building companies. By contrast, in the urban areas in the Netherlands these markets have been lacking. Only very recently, more 'experiments' with 'do it yourself building' are starting up in urban areas, partly as an answer to the decreasing building production due to the economic crises since 2008.

⁸ Although the losses may be lower than in the Netherlands, for the reason that all the infrastructure and other public services for social houses are constructed and paid for separately by the regional (gewestelijk) government.

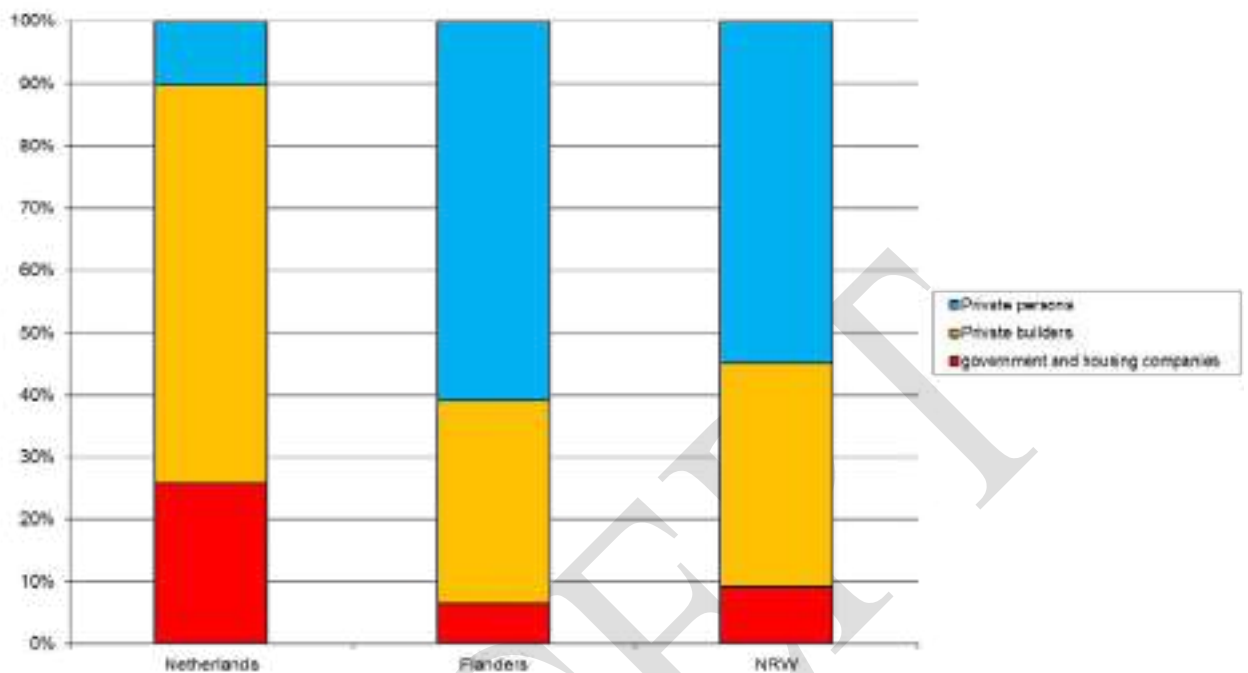


Figure 4.2 Housebuilding commissioning actors

Sources: CBS, De Decker et al (2010) and North Rhine-Westphalia Bank, Compilation: PBL

The common practice in the Netherlands is to build houses in series (85% of dwellings is part of a series of more than 10 dwellings, 50% of more than 50 dwellings). Not surprisingly, building in series decreases variation in architecture and dwelling (sub)type

The majority of dwellings at Dutch greenfield locations are apartments and row houses. But also single family detached homes / two family semi-detached homes are being built in series. In Flanders and North Rhine-Westphalia, the dominant housing type on greenfield sites is the single/two family detached/semi-detached home, or (in North Rhine-Westphalia and recently Flanders) in comparatively very small series.

Of course, land prices play an important factor here. Land prices in Dutch urban areas on average are much higher than in the neighboring countries. The residual value of land has increased as house prices increased sharply, which came to an end only with the financial crisis of 2008. These increases are attributed both to regional housing shortage, according to some an effect of institutional factors like the spatial planning restrictions (Besseling e.a. 2008), or sudden changes in the structure of housing provision (Jokovi 2006), as well as to increased income and improving loan possibilities (Van Oort e.a. 2008) for consumers. Developing and building companies that can economize on production costs, can present higher bids on the land market. Building houses in large series, enables building companies to

economize on costs of material, construction, and supervision. Building dwelling types of higher density like row houses and apartments means higher returns per square meter. Figure 4.3 is a good illustration of this development: in the Netherlands, financial room for buying land increased because of increasing house prices and relatively low increase in costs. The residual value of the parcel under an average dwelling in North Rhine-Westphalia is nowadays much lower than that of the parcel under a Dutch average dwelling.⁹

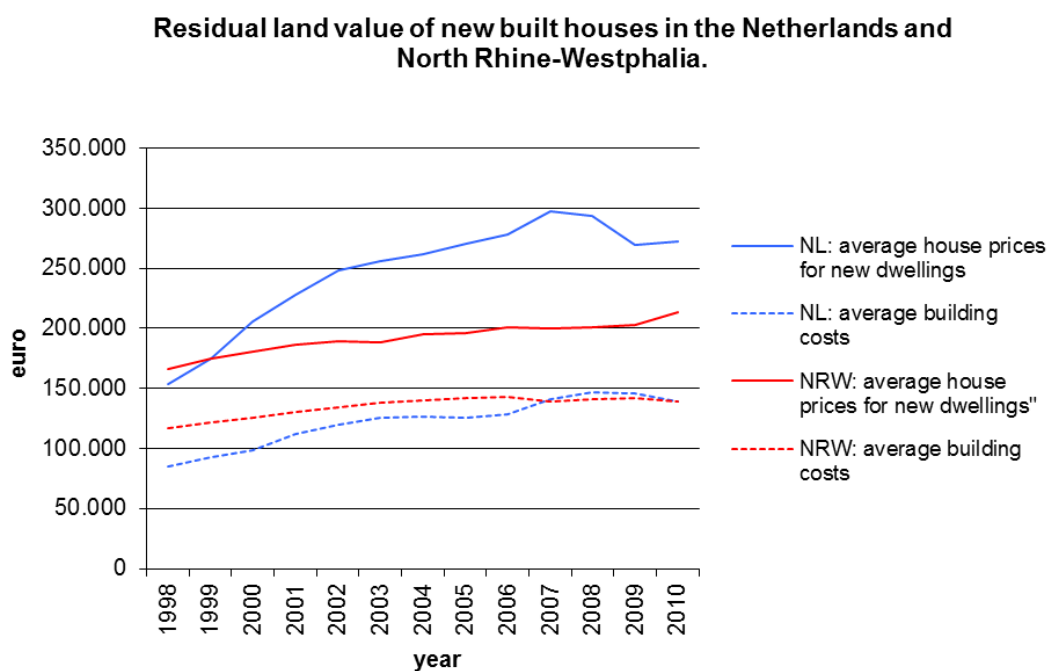


Fig 3.6 Residual land value of new built houses in the Netherlands and North Rhine-Westphalia.

Sources: CBS. OTB (Monitor Nieuwe Woningen), Obere Gutachterausschuss North Rhine-Westphalia

Although high land prices undoubtedly constitute a very important factor in the explanation of typology and variation of Dutch newly built residential areas compared to Flanders and North Rhine-Westphalia, it is questionable whether it constitutes the *only* factor. Why individually commissioned housing is normal in areas in North Rhine-Westphalia where land prices are comparable to that in the Netherlands? Let us take a look at two institutional factors, that structure the supply and the demand side in the market for newly built houses.

At the supply side, we have seen more and more project development companies and housing corporations (Buitelaar e.a. 2008) taking land positions in order to buy themselves into the housing development process (section 4.1). As their motive is to take advantage of high prices on the housing market, they will normally not sell the parcel (after the servicing of the land) to a third party, but build on it

⁹ Unfortunately, it was not possible to retrieve comparable data for the Flemish case. But land prices in Flanders recently reached comparable values as in NRW.

themselves.¹⁰ As municipalities have a tradition of cooperating with large, professional organizations, as described in section 4.1, they have little interest to guarantee access of private persons to the market for serviced land.

But institutional factors also structured the demand side of this market. Although some 30% of Dutch respondents of housing surveys say that they would like to build their own house (against the 10% that actually do), it is not clear how high the demand is in reality, as there is hardly any opportunity for it in urban areas. Contrary to North Rhine-Westphalia the wish to have a say over the construction of the own dwelling apparently for some is so overriding, that in situations of high land prices, they choose to commission row houses, or collectively build an apartment block.

Dol et al (2010) make use of ideal types to describe the national differences in housing markets. Following Martens (1990), they characterize the Netherlands as a *dynamic* housing market, whereas Belgium and Germany belong to the *static* housing markets. These ideal types refer to a particular collective images about housing (culture), as well as to an institutional and market structure that has developed around it.

In these two market types, people have different expectations of a house (Toussaint et al 2007). In a static market like in Flanders or North Rhine-Westphalia, ownership of a house is once-in-a-lifetime. The decision to buy or build an own dwelling is only taken when you are settled, and other factors in life like career and relationship are relatively stable. Therefore, one takes the decision to buy or build a house at an relatively late phase in life, before that time, renting is the normal option. Once you bought a house, ideally one will live there for (almost) the rest of one's life and the house is *adapted to one's changing needs*: maybe in the beginning one wants to let part of the house in order to save costs, and take all the house for oneself when the children are older. When income is higher, maybe one wants to extend the house. And maybe one wants to adapt the interior to one's needs when one is old. Moreover, much more than in dynamic markets, home ownership is seen as part of the pension, as one live there 'for free', or even let (part of it) for extra income.

In dynamic markets like the Dutch one, peoples have other expectations of home ownership. At different stages in life, you do not so much adapt the house, but sell it and buy another (bigger) one. Home ownership starts relatively young, and with different conditions (career, relationships, family) it is normal to move to another home that fits more your needs. It is not a 'course-of-life-house', but a 'resale-house'. The house is seen as an financial investment, but less as a secure 'pension in stone' but more as something that increases in value in an favorable market.

These leads to a different demand on the market, with morphological consequences, too. First, in static housing markets, houses need to be more *adaptable*. A detached house on a relatively large plot is more adaptable than row houses and apartments. Numerous alterations of the houses yield a more varied street view. Second: as home ownership comes close to a 'life destination', it is more important to have the house built according to one's own personal ideas, ideally

¹⁰ Segeren (2007) describes this as one of the reasons for institutional investors not to wait for the supply of serviced land, but to buy unserviced land themselves.

tailor-made. Whereas in a dynamic housing market, the overriding concern is that market value should be preserved, the house should not be so eclectic or personalized that the ability to sale is being affected.

The different expectations of home ownership are supported by differences in institutions between the two types of housing markets. In the dynamic Dutch market, institutions that support individually commissioned housing are lacking. For example, in Flanders and North Rhine-Westphalia, architects are much more adjusted to advise and coach private persons in the construction process (Dol e.a. 2011). In Belgium, architects are liable for flaws in the construction. In Germany, municipalities have set up departments to help private person in the process of individually commissioned housing in the social or affordable sector.

Institutions that structure the financing possibilities for home owners, too, differ according to housing system. In the German static housing market, mortgage banks apply a much lower loan/value ratio than used to be the case in the Netherlands (80% to 115% in 2007). In other words, Germans have to save a lot of money before being able to buy or build, and institutions like '*Bausparen*' prepare for this. In the Dutch situation, mortgage conditions were eased during the 1990s/2000s, which supported the resale of houses.

But private persons wanting to build a dwelling for themselves are not the only type of small investors that is more or less absent in the Dutch housing development in urban areas. First, in Flanders and North Rhine-Westphalia there are more small builders active on the urban market, that is far more favorable for them than in the Netherlands. Building normally for private persons, small builders in Flanders or North Rhine-Westphalia may sometimes invest in developing a couple of house themselves. Second, in the Netherlands, there are practically no private persons that invest in house building with the motive to let - in part or as a whole. The private renting market is relatively small in the Netherlands (figure 4.4). Private landlords are present in older neighborhoods, but do not often invest in new houses at greenfield locations. By contrast, the private renting market in Germany is rather large and building for private renting is made fiscally advantageous. In total it is even more promoted than home building for owner-occupiers (Braun& Pfeiffer 2004,

cited in Haffner e.a. 2009).

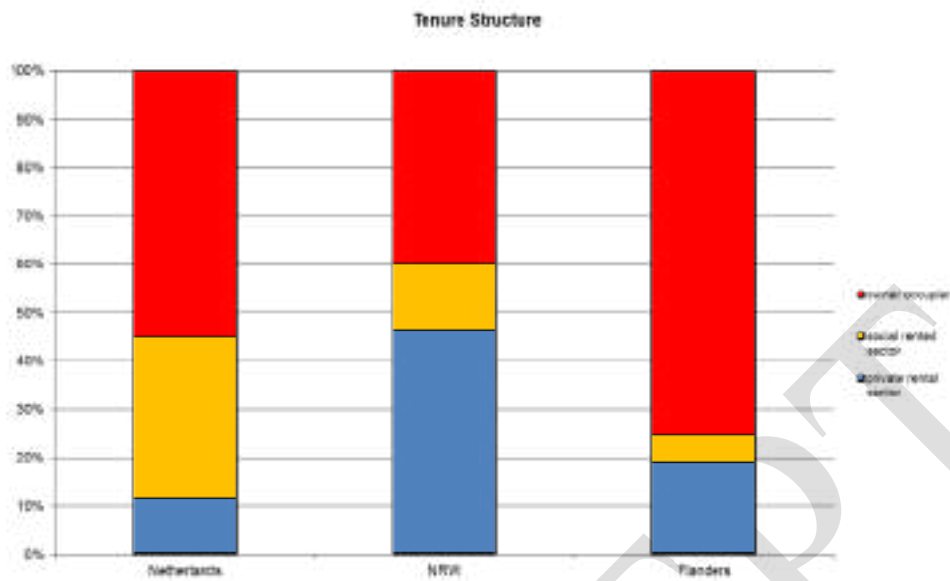


Fig 4.4 Tenure structure in the Netherland (2006), Flanders, (2005) and North Rhine-Westphalia (2005). Sources Woningmarkt cijfers.nl, De Decker e.a. (2010) and Wfa (2006)

5. Conclusion

Although morphology of recently developed residential areas on greenfield sites depend in many ways on local and contingent factors, the overall institutional environment determines morphology to such an extent, that it is easy to see the difference between a Dutch, Flemish or German area. Institutions structure the process of housing development, not as to determine form, but as to make some morphology as outcome of the development process more likely than others. In this way, the institutional analysis in this paper supplement other explanations, and gives a more complete account of morphological differences than mono-causal explanations like taste, the rate of population growth, or market circumstances alone. It is also supplementary to research that focuses on the influence of institutions on actor interaction, and leave the analysis of physical outcome to the field of urban design.

In this paper, we have identified some key mechanisms through which housing processes influence form that can be traced back to differences in institutional environment. The first type of mechanism is the *in- and exclusion* of actors from the housing development process. Without saying that this is a conscious process, institutions make it possible to in- and exclude actors with a certain type of interest - for example interest in economies of scale, or a timely completion of the site. The second type of mechanism is the *time span* of the building process. For example, the practice of settlement agreements between participating developing actors reinforces the necessity to complete a housing developed site within a short time period, as opposed to a more open ended and haphazard development.

Institutions give some parties the possibility to influence these mechanisms than others. For example, in large areas in Flanders municipalities do not have the possibilities to exclude private initiatives for housing development anymore because the zoning plan already designates the land for housing. In North Rhine-Westphalia, the rules for compulsory purchase constrain municipalities to exclude private person land owners from the housing process, and at the same the rules for *Umlegung* enables them to approach private persons as co-developing participants.

These institutions are originally man-made for a particular purpose, but when they become the rules-in-use, they subsequently structure the purposeful interaction and become taken-for-granted *practice*. This 'structuration theory' of Giddens (1984.) according to which action and structure are mutually constitutive, has been illustrated in this paper with four practices in housing development in different countries. In these practices, processes reinforce themselves. For example, institutions favor large building sites, so that private persons and small building companies do not have much chance on the Dutch urban housing development markets. Big building companies take over the market at the expense of small ones, private persons cease to know how to commission housing, it becomes hardly an option any more in the Netherlands and the demand for it decreases.

This example brings us to a third and final mechanism through which institutions influence morphology. Not only do institutions structure in- and exclusion, time

span, and differentiate the possibilities for actors to influence this, but institutions also influence *preferences* of participating actors, what they consider as their stake in housing development. For example: the income-structure of Dutch municipalities make it more pressing to participate privately in land development to share in the value increase of the land (apart from the public interest stakes they might have in active land policy). Or Dutch private persons do not consider it their interest to enter the housing development process in order to commission the building of a rented dwelling, in contrast with Germany where fiscal policy subsidizes this.

Including these 'demand'-factors in an institutional analysis brings it close to cultural or discourse theories, that take 'housing cultures' and 'administrative cultures' into account (Toussaint 2007). Further research, studying more precisely the interplay of cultural and discursive factors with structural factors like institutions would yield a more complete account of the mechanisms that form our urban environments.

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CONCEPT