# *HOUSING IN THE NETHERLANDS. SPATIAL VARIATIONS IN AVAILABILITY, PRICE, QUALITY AND SATISFACTION*

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## INTRODUCTION

All through the nineteen fifties, sixties and seventies housing was a top priority in Dutch politics, reflecting severe housing shortages resulting from wartime stagnation in house building on the one hand and a post-war birth explosion on the other. The production of new houses in those decades was very high. The housing stock grew from 2.1 million in 1947 to 4.8 million in 1980, a growth of 130 %, much more than the 45 % growth of the population in the same period. In the two decades after 1980, again two million houses were added to the housing stock. At the turn of the century almost one third of the then 6.6 million houses was built after 1980 (CBS 2001).
At first sight, and considering the considerable drop in birth figures since the mid nineteen sixties, the government's post-war housing mission seemed completed. And indeed other policy priorities came to the fore. In the nineteen eighties and nineties the national policy focus first moved to economic issues: jobs and incomes, and to education, crime and safety matters later. Still, the housing market reveals imbalances between supply and demand, and there is a renewed interest from public, politics and science in the reasons that explain (or excuse) them. One reason for the renewed interest is the awareness that the population growth may be small now, but the number of households is growing rather fast, and also the average 'space consumption' per household continues its growth. Furthermore the conviction has grown that much of the low-quality multi-family and multi-storey houses built in the 1960s and 70s have to be replaced by better dwellings. Thirdly, we reach the end of the possibilities to build on urban 'fill-in locations'. As a consequence, there is the inevitable task to build again considerable numbers of new houses, on greenfield sites, which means overspill of urban areas in the countryside.
In this article we explore the spatial dimensions of the Dutch housing market, on the basis of the five themes that were chosen to illustrate the Dutch housing market in the five cartograms of this year's 'Netherlands in Maps' series, viz. the actual composition of the housing stock, the structure and development of house prices, the occurrence of recreational homes, residential satisfaction, and finally the overall quality of the housing situation, the last by taking together many different aspects of that quality in one encompassing map. For each of these themes, we will comment the accessory map in the respective issues of this year's TESG volume, and add supplementary background information that serves to explain the observed spatial structures and tendencies. For a general discussion of the housing market relationships that exist between the mapped subjects, we refer to the introductory article of this year's Netherlands in Maps series in TESG 2005 nr. 1 (Pellenbarg and Van Steen 2005).

## THE HOUSING STOCK

The present housing stock of the Netherlands amounts to a total of 7 million dwellings (CBS 2005a). Map 1, depicted in the first issue of the TESG 2005 volume, shows the distribution of this housing stock over the 12 Dutch provinces. The largest numbers are found in the provinces of South Holland (0.97 million), North Brabant (0.96 million), North Holland and Gelderland (both 0.76 million). Between the provinces, there are considerable differences in the age of the housing stock, the share of owner occupied houses versus rented houses, and the share of one versus multi family units. Multi family units constitute a relatively large part (a quarter or more) of the housing stock in the three Randstad provinces and Groningen; in the cities of Amsterdam, Rotterdam and The Hague multi family units constitute even three quarters or more of the housing stock. Most of the multi family units are rented houses; most of the single-family houses are owner-occupied. The largest share of old houses is found in the provinces of North Holland (excluding Amsterdam) in the West, and Friesland and Groningen in the North. Pre-war houses constitute 25-30% of the housing stock here. But in the big cities it is much more: 48% in Amsterdam, 45% in The Hague, 38% in Utrecht. Even Rotterdam, with its inner city destroyed by a war bombardment in April 1940, still reaches a score of 35% (ABF 2002). Opposite the many old houses in the cities and the West and North of the Netherlands we find large shares of newer houses in the East and South. As stated in the introduction, in the country as a whole exactly one third of the housing stock is now built after 1980, so less than 25 years old (CBS 2004).
The largest part of the growth of the housing stock, especially in the past few decades, was in the sector of owner-occupied houses, which reached a share of 53% in 2003, compared to 30% in 1960 (Neuteboom and Van der Heijden 2005). The growth of the owner-occupied sector reflects the Dutch government's wish to raise the level of home ownership, which was traditionally low in the Netherlands compared to other European countries. The highest share of owner-occupied houses is found now in the province of Zeeland (66%) and the lowest in South Holland. Of the cities, Amsterdam stands out negatively with slightly less than 20% owner-occupied houses. In Europe, comparable low levels are found only in German and Polish cities. In France, home ownership in the big cities varies from 30 (Paris) to 40 (Lyon) and 50% (Lille), in the UK Birmingham and London reach 60%; Barcelona and Madrid in Spain even have ownership levels as high as 70 and 80% (NRC 2004).

The growth of the housing stock was especially high in the nineteen sixties, seventies and eighties. Between 1964 and 1990, yearly additions to the housing stock were never under a 100,000 houses per year. In the second half of the 1960s house production even reached figures around 120,000 per year, and in the first half of the 1970s a top production was reached of 150,000 houses per year. In the 1990s a decrease of house production set in. Production figures dropped to 90,000 new houses per year, and after 2000 even to around 60,000 per year. In 2004, a good 65,000 new houses were completed, almost 10% more than in 2003 but slightly less than in 2002 (CBS, 2005b). A yearly average of 60,000 new houses is far below the ambition of 100,000 that is found in the government's 2000 housing memorandum (VROM 2000) and will still fail to reach the lower ambition of 80,000 new houses per year that is related to the more recent spatial planning document *'Memorandum Space'* (Nota Ruimte; VROM 2004). This is the more serious because between the national housing surveys

of 1998 and 2002 the calculated national shortage of houses rose from 1.5 to 2.5% of the housing stock. In fact it is even higher than that because the percentages relate to the quantitative shortage (166,000 houses in 2002) while there is a much higher qualitative shortage (291,000 in 2002; VROM 2003). The higher level of qualitative shortage indicates that there is not only a problem of building not enough new houses. There is a mismatch between what is built and what is wanted. A relatively large part of the newly built houses (43%) are multifamily units (apartment buildings of three or more storeys) but this is only 11% of the actual demand (Van Osch 2004). On the other hand there is a quite insufficient production of single-family units, especially owner-occupied houses in the lower and middle price categories, considering the huge demand in this segment. Theoretically, a flow of tenants and owners from cheaper to more expensive houses and from rented to owned houses is supposed to exist, which should create sufficient supply in all categories of houses. But in practice this 'relocation chain' doesn't work quite well, especially not in times of economic stagnation, and thus the mismatch stays intact. Interestingly, part of the mismatch is of a geographical nature: on the market for owner-occupied houses there is a relatively small demand for houses in middle sized or larger cities, but a relatively large production in or near such cities, especially on the so-called Vinex locations (the newly developed residential areas at greenfield locations since 1990). Vice versa, there is much demand but less supply of new houses in smaller towns and villages in the rural parts of the country. We will return to this issue in one of the next sections, on residential satisfaction.

## THE ACTORS IN HOUSING

Who is to blame for the stagnation in house building, and for the persistent mismatch between supply and demand? Discussing this is a popular game in the Netherlands (De Vos 2005). The national ministry of housing cannot really force provinces to build on certain locations or in certain segments. Provinces have to acknowledge that municipalities are free in the choice of houses to be built within their territory. Municipal civil servants tend to argue that in practice not the municipality decides what is being built, but the real estate developers who own the land. Or they point an accusing finger to the more than 500 housing associations. They own 80% of all rented houses in the Netherlands (which is one third of all houses!) and since they were privatised in the 1990s and mainly operate without government subsidies they are free in their choice of producing houses, and more reluctant than before to supply houses for less profitable segments of the market. Next to the complexity of building rules and the shortage of skilled workers in the building sector, the housing associations are most often mentioned as one of the key factors in the house production problem.

A popular proposition is that the housing associations in the Netherlands are rich but inactive. The Central Housing Fund (CFV) that is charged by the central government with the supervision of the associations estimates that the 'excess wealth' of the 550 associations totals 11 billion Euros and will grow considerably in the years to come (CFV 2002). Why don't they use this money to do what they were founded for? Of course since their privatisation ten years ago the associations are private companies, but they kept their social goal of providing housing for lower income groups. Instead of maximising profits and accumulating capital it seems more natural for them to invest in the building and renovating of houses especially in the problem areas of the big cities, where they own most of the 'problem stock' of social rented houses in

backward neighbourhoods. But as Pellenbarg and Kusters demonstrate, this is easier said than done. The wealth of the associations is a wealth in stones, not in free capital and earning capacity. The value of their stock of (2.4 million!) rented houses is large in theory, but difficult to realize in actual selling.
Another problem, more geographical in nature, is the uneven distribution of the investment pressure per dwelling between regions. The housing associations in the big cities would need the help from associations in surrounding regions. The government minister of housing and spatial planning considers compelling associations to such a 'brotherly financing' or 'matching' of investments, but the success of such a measure is doubtful (Pellenbarg and Kusters 2004). One modest step ahead has nevertheless been made recently through the institution of a joint fund for investment in the rebuilding of houses in urban problem areas, the so-called Wooninvesteringsfonds (WIF). Wealthy housing associations have invested 100 million Euros in this fund, to help poorer associations to demolish and rebuild affordable houses in the problem areas (Staps and Tamminga 2005).

## HOUSE PRICE DEVELOPMENT AND HOUSING AFFORDABILITY

Predictably, prices for owned houses reflect a difference between the Randstad region and parts of North Brabant with relatively high prices on one side, and the periphery of the country on the other, especially the North, Southwest and Southeast (Zeeland and Limburg) where prices are lower. The house price map in TESG's 2005-2 issue confirms this, by situating the top ten municipalities with high and low average prices exactly in these regions. For rented houses geographical price differences are much smaller, except in the so-called 'liberal sector' where rents are free. In this liberal sector the average rent per house per month is for instance over 1200 Euros in Amsterdam and less than 700 in the city of Groningen. On the market for owned houses a process of levelling out seems to have started recently. Nationally, the time of excessive increases in house prices is over, but in the periphery, especially Zeeland, Friesland and Groningen, an 'overhaul' effect produced higher than average price increases in 2004, a process that continues in 2005, certainly in the North of the country. Incidentally there is some discussion about these relative price movements, as the national office of land registry (Kadaster) recently introduced a new system of calculating house values (the so-called 'value index') that leads to alternative results (Van Alphen 2005).
Maybe more important than the price levels as such, is the relation between price (for owner-occupied houses) and income; in other words, the affordability of housing. The affordability map, which was also shown in the TESG 2005-2 issue, tells a quite different story than the price development map. In the Amsterdam and Rotterdam conurbations house prices may be high, but we find also a concentration of higher incomes here, resulting on average in a high to very high affordability. In the North, house prices are low compared to the Randstad, but incomes are not so much lower, so the affordability is relatively high here as well. The same is true for Zeeland in the Southwest. The lower levels of affordability are found in central province Utrecht and the adjoining provinces to the East and South: Gelderland, North Brabant and Limburg. Here the average incomes are less high than in the Randstad, but the house prices are on a rather high level, with low or very low affordability as a result. There is also a narrow strip of average to low affordability along the West coast, possibly reflecting the higher than average house values in the coastal strip, especially the sand dune coast to the North of The Hague.

It is tempting to theorize about the general relation between the issues in the first two of the Netherlands in Maps series, viz. supply, price, and income, and then to infer conclusions that may explain the patterns on the maps. However this is dangerous, as we will shortly explain. Theoretically, there is indeed a balance between supply and demand on the housing market (the subject of map 1) and between house prices and household incomes (the subject of map 2). On the short term, market imperfections may disturb the relationship between these variables, but on the long term, the balance will stay intact. De Vries and Boelhouwer (2004) demonstrated this recently for the long-term relation between prices and incomes. But there is also contradictory evidence, witness a report from the OECD (2004). The OECD signals that in the past decades house prices in The Netherlands have increased considerably, also in comparison to other European countries. Real house prices in the Netherlands increased between 1971 and 2002 at an annual rate of 2,9%, the fourth highest rate among OECD countries. Only the UK with a 3.6% increase, Spain with 3.5% and Ireland with 3.1% scored higher. Of course in this long-term trend figure the strong house price declines of the early 1980s have a quenching effect. In the last decade, 1991-2002, the Netherlands scored a much higher annual increase of 6.7%, which was the highest rate of all OECD countries, compared to an average OECD price decline of minus 0.6% (OECD 2004). As stated, high increases in house prices theoretically correspond with high-income growth, but this is not the case in the Netherlands. Here, the ratio of house prices to disposable incomes increased more than in any other OECD country except Spain. The OECD report says that these figures suggests that in the Dutch case, the 'high growth in real house prices is not attributable to strong demand but rather to weak supply responses. Prices are so high in relation to disposable income that demand is price inelastic' (OECD 2004, p. 3). This raises a question about the nature of the supply-demand-price relationships. Again in theory, there are two contradictory options to understand this relationship. One is to understand the market for (owner-occupied) houses as a stock market, which is then very sensitive to restrictive spatial policy measures, because such measures tend to reduce supply. The other option is to give heavier weight to the situation on the market for newly built houses, and regard house prices as dependent of the level of building costs and the amount of supply on the market. In their recent analysis of price and supply of newly built houses since 1989 De Vries and Boelhouwer (2004) were unable to prove this relationship. The impression results that theoretical balances cannot be found because the housing market in the Netherlands is complicated too much by market imperfections, especially the rent-subsidies to one million households in the rented sector and the fiscal mortgage interest deductions to almost three million households in the owner-occupied sector.

What can be expected for the near future? Fiscal mortgage interest deductions are under political pressure, especially from left wing parties, and not unlikely to disappear, maybe after a period of gradual decrease of deduction possibilities. The obvious reason is that the cost of the deductions (forgone taxes) is getting out of hand. Between 1990 and 2003 the forgone sum rose from 3.4 to 9 billion Euros per year (it will be 11 in 2007). In the same period the total of all mortgage debts rose from a third to three quarters of the GDP (Van Rijswijk 2005). However, there is a big fear that abolishment of the deductions will serious damage the national economy. Here the UK, Denmark and Sweden serve as examples, although the effects of abolishment for the economies of these countries were divergent, and not unequivocally relatable to the stop on tax deductions. Recently, Boelhouwer and De Vries predicted from a

model calculation a 23-30% price drop for owner-occupied houses in the Netherlands when fiscal mortgage interest deductions would be stopped right away, and 7% when the abolishment would be introduced in a more moderate form (Boelhouwer and De Vries 2005).
Maybe house price decreases will set in anyway, because there is a general feeling that prices have risen far above realistic levels in the past decade. This is in fact a worldwide phenomenon, and the same can be expected for any price trend change, although predicting is a risky game. Robert Shiller recently forecasted the general trend of house prices in the larger cities worldwide. He explains the feverish house price increases in world cities during the past decade from psychological causes such as 1) the growing desire for a 'safe' investment in one's own house in a turbulent, terrorism-stricken world with unreliable stock markets, 2) a growing feeling of confidence in popular international cities, thanks to the explosive growth of worldwide communication facilities such as internet, and 3) the 'speculative contamination' that characterises the modern housing market. Of these causes the last one is supposed to gradually disappear but the first two seem more permanent. So some price increases may be still expected for the next few years. But Shiller expects house prices in the popular cities to decrease sharply in the face of the next serious depression, or when interests go up too fast. Then the contamination effect will start to work in reverse order and cause prices to decrease for many years (Shiller 2004). In the Netherlands, such a development will presumably start from Amsterdam, and from there spread to other parts of the Randstad first, and the periphery later.

## RECREATIONAL HOMES

A growing group of people in the Netherlands occupies not one but two (in a few cases even more) houses – a tendency known from many other countries. For a recent overview of the geographical literature on second homes we can refer to the article by Dijst et al. in the second issue of this year's TESG volume (Dijst et al. 2005). As Dijst et al. argue it is not too easy to define exactly what a second home is. The fifth memorandum on spatial planning (VROM 2001) estimates a total of 600,000 second homes, but this is an exaggeration, mainly because it incorporates cabin boats. According to Dijst et al. in 1999 only 53,000 dwellings were true recreational homes, owned by residents of the Netherlands, and another 130,000 were non-mobile caravans. Whatever the source of counting, these numbers are growing fast. The CBS (Statistics Netherlands) for instance reports a growth of recreational dwellings from 73,000 in 1995 to 95,000 in 2005 (CBS 2005a), which is 30% more in ten years. The most recent and encompassing survey of second homes in the Netherlands is from Van der Rijden et al. (2003). From their report we took table 1, as a close estimate of the present size of the various types of second homes in the Netherlands.

Recreational homes and non-mobile caravans are by far the largest group of second homes. If we disregard the non-mobile caravans, who have a semi-permanent character, the recreational homes are the most interesting category. In TESG 2005-3 a map of the recreational homes was presented, on the basis of Van der Reijden's report. At first sight the map very much resembles the map of recreational homes presented by Dijst et al. in TESG 2005-2, but it differs in a number of important aspects:

- Dijst et al. show Dutch-owned homes, ours shows all recreational homes;
- Dijst's map depicts the 1998 situation, our map depicts the situation in 2003;
- Dijst's map is on a municipality basis, while ours is postcode-based;

- Dijst's map is based on CBS statistics; our map is based on the report by Van der Reijden et al. 2003 that used a wider variety of sources: the tax registers, the house demand survey WBO, the allotment survey CVO, and the non mobile homes survey by NRIT.

Table 1 Estimate of recreational and other second homes in the Netherlands

| | | |
|---|---|---|
| A. Owned by Dutch residents | | |
| Recreational homes | 105,000-117,000 | 45% on recreation parks<br>55% outside recreation parks |
| Non-mobile caravans | 220,000 | most on campings |
| Houses on allotments | 31,000 | when suitable to pass the night |
| *Subtotal* | *356,000-368,000* | |
| B. Owned by Non-Dutch | | mostly owned by Germans |
| *Subtotal* | *17,000 - 20,000* | |
| C. Regular houses used as second homes or pied-à-terre | | most pied-à-terres are in the big cities |
| *Subtotal* | *8,800* | |
| **Grand total** | **381,800-396,800** | |

Source: Van der Reijden et al. 2003

The resulting map shows of course the expected narrow band of recreational homes along the sand dune coast of Zeeland, South Holland, North Holland and the Wadden Sea islands, with only a few empty areas to the West of Amsterdam and to the North of The Hague. Here we find protected areas, among others for water storage. Next to this there is a heavy density of recreational homes in the eastern provinces of Drenthe, Overijssel and Gelderland. Compared to this, the South (especially Southwest Gelderland and North Brabant) has a less than expected density of recreational dwellings. Furthermore, the East-West zone along the big rivers Meuse and Rhine is more or less empty. Interesting details are the Soutwest-Northeast oriented zone in Friesland along the string of lakes in that province, and the concentration in the South of Limburg, the hilliest and quite attractive part of the country. The general trend is that you find recreational homes near to water and woods, except for the allotments that tend to be near the cities.

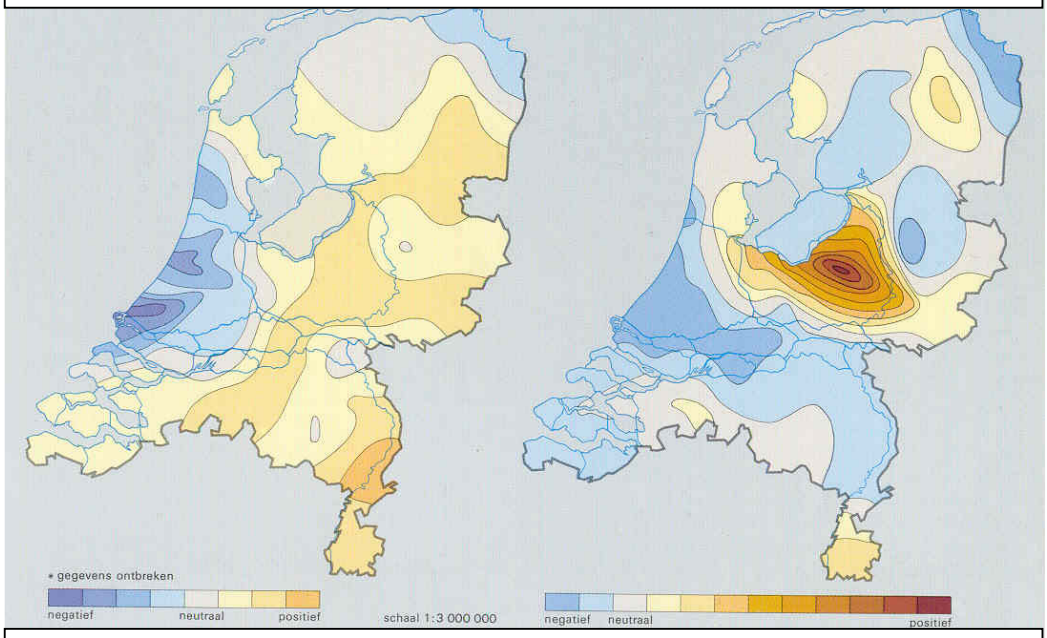
A few years ago it was estimated that about 18,000 (then: 20%) of all second homes is in fact in use as a permanent residence (SGBO 2000). If we change 'permanent' into 'more or less permanent' this may even be much more, up to 50% of all recreational homes (Voogd 2002). Especially the newest generation of recreational homes is of a quality that easily allows permanent residence, which makes it understandable, but nevertheless permanent residence of recreational homes is illegal and as such became a target of corrective government policy. It is considered unfair to misuse an official recreational land use to reside permanently on the more attractive sites of the country for below market prices. The national minister of housing and spatial planning takes a firm standpoint in this and so do some (not all) provincial governments, but in practice many municipal governments follow a more tolerant policy. In 2005, one quarter of all 467 municipalities of the Netherlands still has not yet reacted on the minister's wish to clear up their position with respect to permanent resident of recreational homes (Winkel 2005).

## RESIDENTIAL SATISFACTION

Price levels of houses not only reflect differences in availability, but also differences in quality of houses and house environments. Quality of housing is very difficult to assess, because so many different (and diverging) variables can be chosen as quality indicators. Moreover, there is a difference between objective (measured) quality and subjective (perceived) quality. Map number 5 in this year's fifth issue of TESG concludes the map series with an attempt to sum up objective qualities. In the preceding fourth map however, we take a look at the other, subjective side of quality, i.e. residential satisfaction. Still, the question is on which aspects to focus the resident's subjective appreciation of the houses and surroundings they live in. For the residential satisfaction map in TESG 2005-4 we chose four indicators from the 2002 national house demand survey WBO (VROM 2003). Two of the four indicators represented positive aspects i.e. appreciation of the own house and social cohesion in the neighbourhood, and two others negative aspects i.e. disturbance and street-refuse and neighbourhood degeneration. The resulting values for each of the WBO regions were then used as a basis to construct an isoline map. This procedure is identical to the technique used by Heida and Gordijn who produced a residential satisfaction map for the Netherlands now more than 25 years ago, although on the basis of other indicators (Heida and Gordijn 1978) so the comparison has to be made with care.

Figure 1 Regional housing preference in the Netherlands

*(Left: appreciation of the own housing area. Right: appreciation of housing areas elsewhere)*




*Negative-neutral-positive* *Negative - neutral - positive*

Source: Heida and Gordijn 1978

Figure 1 depicts the Heida/Gordijn results in two different maps, one (left) showing the appreciation (satisfaction) for one's own residential area, the other (right) the appreciation for residential areas elsewhere, both in 1978. The left map is comparable

to our TESG 2005-4 map. Like our map, the Heida/Gordijn map reveals a low satisfaction in the North and South Randstad wings, but in the 2005 map there is much more variation in the satisfaction patterns outside the Randstad. The cities of Groningen in the North and Arnhem/Nijmegen in the East are now visible as new (urban) islands of low satisfaction, and ridges of high satisfaction are visible in the Southwest and Northeast, areas that are generally understood as 'green and quiet' and (according to the TESG 2005-2 map) offering houses at affordable prices. Quite remarkable is the absence of
high satisfaction in the sandy areas of North Brabant and the North of Gelderland (the 'Veluwe', which still figured on the right hand Heida/Gordijn map in 1978 as by far the most wanted area to live in of the whole country!). Also the South of Limburg is strikingly absent on the 2005 satisfaction map.
Referring to our description of housing demand and supply conditions in one of the preceding sections of this article, we may consider the residential satisfaction map as a challenge to all actors engaged with housing in the Netherlands. The map confirms the tension between what is actually produced: mainly houses in or near cities, and what is wanted: more houses in smaller towns and villages in the rural parts of the country. Of course, many of those who wished they would live in more rural environments cannot escape the necessity to live more close to where they work, in the urban areas. But in a wider time perspective, the satisfaction map may foretell more deconcentration of residential patterns in the Netherlands.

## QUALITY OF THE OVERALL HOUSING SITUATION

In TESG 2005-5 the Netherlands in Maps series on housing is concluded with an attempt to picture the spatial variation in objective qualities of houses and house environments, as a counterbalance to the subjective satisfaction map of TESG 2005-4. For this concluding map number 5 we didn't use the same four criteria as for map 4, but on purpose tried to find a much greater number of indicators, to come as close as possible to an objective overall picture. This not only concerns the quality of houses per se, which has definitely improved in the last decades (table 2) but also the house environments. The ambition to create an overall picture is quite near to the efforts of the Dutch opinion magazine *Elsevier*. This magazine published a number of comparable mappings since 2002 (with great public response!) on the basis of a large number of indicators for the quality of houses and housing environments i.e. educational and medical services, sport and leisure facilities, safety, accessibility etcetera (Van Leeuwen and Vullings 2002, 2004, 2005). All indicators are on a municipality basis, converted from their original values to 5-point scales, and then added together.

Table 2
Selected quality indicators of the housing stock of the Netherlands, 1978 and 2001

| | 1978 | 2001 |
|---|---|---|
| Value of the housing stock (billion Euro's) | 65.4 | 718.8 |
| Average number of rooms | 4.9 ( 4.7) | 4.2 ( 4.1) |
| Average floor space (square m.) | - | 98 (115) |
| Average content (cubic m.) | (461) | (542) |
| Share of single-family dwellings (%) | 68 ( 76) | 71 ( 73) |
| Built after 1948 resp. 1970 (%) | 43 | 47 |
| Residential density (houses per square km) | 113 | 166 |

(figures for newly built houses in brackets)

Source: Neuteboom and Van der Heijden (2005)

For our map, we didn't follow Elsevier in all respects. Some of the Elsevier indicators were dropped and some others added, resulting in a quality profile of 17 indicators, grouped under four thematic headings: houses, services, accessibility and safety (table 3). First we constructed a separate map for each of the four themes, after which the four maps were added to construct the final map.

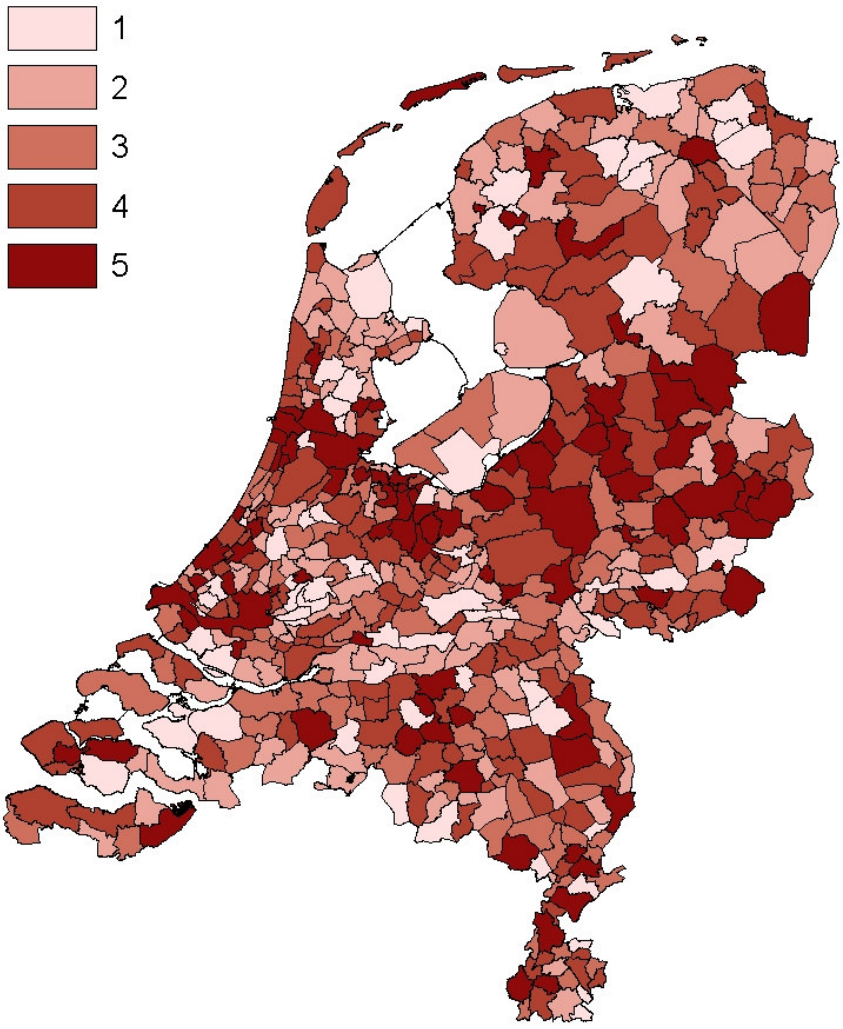
Table 3
Quality profile for the TESG 2005-5 map

| |
|---|
| *Houses*<br>- Real Estate Tax value<br>- Local levies, among which Real Estate Tax<br>- Percentage of detached houses<br>- Percentage of dwellings with 6 or more rooms<br>- Percentage of houses with a garden, garage, carport |
| *Services and facilities*<br>- Number of school types<br>- Number of shops per 1000 inhabitants<br>- Cultural facilities (i.e. museums, libraries)<br>- Recreation and sport facilities<br>- Surface percentage nature and wooded areas |
| *Accessibility*<br>- Railway stations per inhabitant<br>- Length of state and provincial motorways per km2<br>- Negative impact of road traffic congestions |
| *Safety*<br>- Traffic safety (accidents)<br>- Crime recordings per 1000 inhabitants<br>- Recordings of property destruction<br>- Recordings of menace |

The resulting final map of the overall (objective) housing quality, which is published separate from this article as the fifth map in the Netherlands in Maps series on page xxx displays a striking resemblance to the map in TESG 2005-4 that showed residential satisfaction. The matching is not perfect in detail, but generally speaking the housing quality level for many cities, especially the largest ones, is rather low, like in the satisfaction map. Also, the Randstad urban area as a whole shows low values. The higher quality levels are found again in the rural areas in the North, East and South. However, a mapping result like this tends to be sensitive to changes in the number and sort of indicators that are used to produce it. To test this, an alternative quality map was made in which the indicators for detached houses with gardens and garages were replaced by the average selling price for houses, and some new indicators for services were added, notably medical services and homes for elderly people. Also economic indicators were introduced, viz. the average household income and unemployment Bornebroek et al. 2005). This brings the list of indicators closer to the original Elsevier product, and not without effect. The resulting alternative housing quality map (shown in figure 2) is remarkably different from the mapping result that we obtained from the quality profile of table 3! In fact, the picture is more or less reversed and instead of resembling the satisfaction map it is now its reflected image. In figure 2

most of the municipalities in the North and South Randstad wings show high instead of low scores. Where the satisfaction map showed an Eastward stretching band of low appreciation from the Randstad into the provinces of Utrecht and Gelderland, we now find a band of high objective housing quality. The urban areas of Groningen and Arnhem are now hills instead of holes. In fact, from the TESG 2005-4 map only parts of the ridges of high satisfaction in the Southwest (Zeeland) and Northeast (South Friesland-North Drenthe) are still discernable as areas with high objective quality. Interestingly, such small ridges of high quality in the North, East and South are present on both quality maps

Figure 2
Residential quality of municipalities in the Netherlands (1=low; 5=high)
(alternative set of indicators, including work, income and price of houses)




Source: Bornebroek et al. 2005

and thus prove to be insensitive to the change of indicators. The main difference between map number 5 in our series and its alternative: figure 2, is the position of the Randstad. When the chances on work and higher income are considered to be a part of a region's residential attraction, and the price of a house is considered as a better

quality indicator than its size and attributes, the Randstad is a preferable residential region in objective terms, otherwise it is not. And there's another consequence. If work, income and house prices are considered important as quality indicators, this also means that the sum of the objective quality indicators is a poor predictor for residential satisfaction. Factual reality clearly would then be very different from people's perception of reality. This furnishes food for thought, because actual behaviour on the housing market will be guided by percepted reality rather than by objective reality.

## CONCLUSIONS

It is difficult to sum up the developments on the housing market, especially the geographical aspects, in a few firm conclusions. As the map series has shown, the picture is multi-sided and complex. On the quantitative side, the picture is dominated by the discussion about the decline in house production. On the qualitative side, the mismatch between the nature of what is produced and wanted is most eye-catching. Both problems have a geographical angle: wanted numbers and types of houses and locations do not correspond enough with how much, what and where is developed and built. More rural locations for housing are wanted, but to make this possible, existing conceptions of restrictive spatial planning will have to be reformulated. The last national document on spatial planning *'Memorandum Space'* (VROM 2004) may be considered as a first step in this direction, but the question is whether this will be a persistent and effective policy course. At the urban side of the housing spectrum the possibilities of building houses on 'fill-in locations' to produce more 'compact cities' are running out. The majority of the production of new houses is now realized on the so-called 'Vinex' locations that are situated at such distances of the old cities that one can wonder if they really can be considered as a part of these cities. For many of the inhabitants, it certainly doesn't feel like that, and such feelings are more important than ever, the more so because we observed a potential difference between facts and perceptions concerning the housing market situation. Personal feelings of belonging and the identification and appreciation of places are of interest. This is because they influence housing behaviour, but also because the influence of government planning on the spread of population is now gradually giving in to the influence of individual location preferences. Especially the identification and understanding of personal life styles is important as a basis for the prediction of residential location choices (Van der Knaap 2002). To take this into account, a behavioural perspective is needed for all actors in the housing arena and in all phases of the production process, especially not forgetting real estate development which is unjustly perceived as an activity with only a one-sided financial focus (Black et al 2003).

### Acknowledgements

The authors want to thank Ykje Vriesinga for her indispensable help in assembling the necessary data for this year's Netherlands in Maps series, and Tamara Kaspers for designing the five maps of the series.

## REFERENCES

ABF (2004) *Woningvoorraadgegevens 2002*. Delft: ABF Research

Alphen, F. van (2005) Huis meer waard volgens Kadaster. In: *Volkskrant* 27-5-2005

Black, R.T., M.G. Brown, J. Diaz III, K.M. Gibler, T.V. Grisson (2003) Behavioral Research in Real Estate: A Search for the Boundaries. In: *Journal of Real Estate Practice and Education* 6-1, pp. 85-112

Boelhouwer, P.J. and P. de Vries (2005) Defiscalisering eigen woningbezit leidt tot forse daling woningprijzen. *Economisch-Statistische Berichten* 90/4455, p. 109-111

Bornebroek, W.J.J., J. Buschenhenke, K.J. Meijer, H.C. Rietema (2005) Rapport woonkwaliteit Nederlandse gemeenten. Unpublished bachelor thesis. Groningen: Faculty of Spatial Sciences

CBS (2001) *Statistisch Jaarboek 2001*, Voorburg/Heerlen: Centraal Bureau voor de Statistiek (Statistics Netherlands)

CBS (2004) *Statistisch Jaarboek 2004*, Voorburg/Heerlen: Centraal Bureau voor de Statistiek (Statistics Netherlands)

CBS (2005a) *Statistisch Jaarboek 2005*, Voorburg/Heerlen: Centraal Bureau voor de Statistiek (Statistics Netherlands)

CBS (2005b) Meer woningen binnen twee jaar gereed. In: *CBS Webmagazine* 29-3-2005

CFV (2002) *Financieel gedrag woningcorporaties*.

Dijst, M., M. Lanzendorf, A. Barendregt and L. Smit (2005), Second homes in Germany and the Netherlands: ownership and travel impact explained. In: *Tijdschrift voor Economische en Sociale Geografie* 96, pp. 139-152

Heida, H., and H. Gordijn (1978) *Regionale woonvoorkeuren*. Delft: TNO

Knaap, G.C.A. van der (2002) *Stedelijke bewegingsruimte*. WRR Voorstudies en Achtergronden V113.The Hague: SDU Publishers

Leeuwen, A. van and G. Vullings (2002) Waar is het goed wonen in Nederland? In: *Elsevier Special*, July 2002, pp. 37-58

Leeuwen, A. van and G. Vullings (2004) Waar is het goed wonen? In: *Elsevier*19-7-2004, pp. 52-76

Leeuwen, A. van and G. Vullings (2005) Waar woont u veilig? In: *Elsevier* 25-6-2005, pp. 52-86

Neuteboom, P. and H. van der Heijden (2005) *Conjunctuur op de Nederlandse Woning(bouw)markt*. Utrecht: DGW/NETHUR partnership series nr. 33

NRC (2004) *Weinig eigen woningbezit*. Nieuwe Rotterdamse Courant 4 –12-2004

OECD (2004) *Economic survey of the Netherlands 2004; Chapter 2 Housing policies*.

Osch, B. van (2004) Waar blijven de huizen? In: *Elsevier*, 21-8-2004, p. 62-65

Pellenbarg, M.H. and M. Kusters (2004) Steenrijke woningcorporaties? In: *Service Magazine* 11 nr. 3, p. 26-29

Pellenbarg, P.H. and P.J.M. van Steen, (2005) Housing in the Netherlands: Introduction to the 2005 maps. In: *Tijdschrift voor Economische en Sociale Geografie* 96, pp. 132-134

Reijden, H. van der, R. Aykac, J. van Iersel, G. Keers, F. den Breejen and P. Sprenger (2003) *Tweede woningen; voorraad en ontwikkelingen*. The Hague/Amsterdam: Ruimtelijk Planbureau/RIGO Research en Advies BV

Rijswijk, E. van (2005) Een heilig huisje slopen. In: *Elsevier* 2-4-2005, p. 54-55

SGBO (2000) *Permanente bewoning van recreatieverblijven en het recreatief gebruik van woningen met een woonbestemming; inventarisatie en stand van zaken*. The Hague: SGBO

Shiller, R. (2004) Een zeepbel op de woningmarkt. In: *Het Financieele Dagblad*, 25-10-2004, p. 7

Staps, F. and M. Tamminga (2005) Potje van 101 miljoen voor huizenbouw. In: *Nieuwe Rotterdamse Courant* 2-7-2005

Voogd, H. (2002) *Beleid recreatiewoningen is hypocriet en kortzichtig*. In: Volkskrant 10-1-2002

Vos, B. de (2005) Woningbouw negeert woningbehoefte. In: *Binnenlands Bestuur* 18-3-2005, p. 30-33

Vries, P. de and P. Boelhouwer (2004) *Langetermijnevenwicht op de koopwoningenmarkt*. Utrecht: DGW/NETHUR partnership series nr. 28

VROM (2000) *Mensen, wensen, wonen*. The Hague: Ministry of Housing and Spatial Planning

VROM (2001) *Ruimte maken, ruimte delen. Vijfde Nota over de Ruimtelijke Ordening 2000/2020* (Fifth Memorandum on Spatial Planning). The Hague: Ministry of Housing and Spatial Planning

VROM (2003) *Beter thuis in wonen. Kernpublicatie Woningbehoefte Onderzoek 2002*. The Hague: Ministry of Housing and Spatial Planning

VROM (2004) *Nota Ruimte; ruimte voor ontwikkeling*. The Hague: Ministries of Housing&Spatial Planning, Agriculture, Transportation, and Economic Affairs.

Winkel, A.C. (2005) *Permanente bewoning van recreatiewoningen*. Unpublished Ma thesis. Groningen: Faculty of Spatial Sciences