Lifestyles and patterns of housing environments in peri-urban areas in Flanders

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\textbf{Introduction}

This paper gathers data and information from different researches at the Centre for Mobility and Spatial Planning of Ghent University. Two main research topics come together: the \textit{planning discourse of open space as public space} and the \textit{concept of lifestyles}. Both research topics are inspired by one of the most important socio-cultural challenges in contemporary network society: learning to cope with the other, with diversity and differences (Lofland, 1998). They both aim to attribute to a more socio-cultural inspired spatial planning approach in Flanders.

Two context elements are important to understand the research results: Flanders, i.e. the northern part of Belgium, and the planning context in Flanders.

The region of Flanders - with its central position in north-western Europe, its important historical buildings and settlements, its urban and suburban sprawl and (more recently) the influence of Brussels as European centre - and the Flemish inhabitants are the study objects of the research projects.

The recent planning context in Flanders is dominated by the implementation of the Spatial Structure Plan document (MvG, 2004), adopted in 1997. This plan aims to halt the urban sprawl that is threatening the biodiversity, water quality and mobility of the region and therefore distinguishes four spatial components: urban areas and urban networks, rural areas, areas for economic activities and linear infrastructure. In the urban areas the Flemish government aims to stimulate and to concentrate activities, to develop new housing typologies and environments, to stimulate alternatives of urban mobility and to diminish the chaotic dispersion of urban functions. In the rural areas the aim is to protect the open space and to resist fragmentation, to concentrate development in the nodes (villages) and to support agriculture and nature development in well structured parts. As a result planning processes were initiated to determine the boundaries of the urban areas.
The morphological analysis and the cluster analysis of housing environments further elaborated in this paper, will reveal that the actual urban-rural planning policy, is very normative. In the southern area of Ghent, an area with an urban and a rural part referring to the spatial components of the Spatial Structure Plan, the morphological pattern as well as the clustered housing environments have no substantial urban or rural component. On the contrary they reflect the urban and suburban sprawl of Flanders.

**Theoretical backgrounds**

It is not possible to give all theoretical backgrounds in this paper. The most important hypotheses and elements of the research and literature review of the two main research topics: the planning discourse of open space as public space and the concept of lifestyles, will be highlighted.

**The concept of lifestyles**

In the past planners or designers tried to describe inhabitants in relation to their demographic or socio-economic profile (children, young families, elderly people, mid-income families, singles, …) (MvG, 2004). Others use the concept of lifestyles to explore the consumers diversity in relation to their consumption (= marketing) (Kotler et al., 2006; Holt, 1995), societal aspects (= sociology) (Weber, 1972; Bourdieu, 1984; Ganzeboom, 1988) or individual value-patterns or personality traits (= psychology). The popularity of the lifestyle concept changed over time but recently the concept is often used within a policy context.

There is no universal definition for the concept of lifestyle and different approaches can be distinguished, such as the quantitative versus the qualitative approach (Coppens, 2008). Cathelat (1993) identifies five different quantitative methods for the analysis of lifestyles: the psychographic (focus on individual psychology of subconscious dives), the sociographic (focus on the most rational public opinions), the culturalistic (lifestyles as means of adherence to a group system of values), the mechanistic (focus on behaviour and more specific on the consumption of goods) and the poststructuralistic lifestyle approach (focus on contextuality).

A lifestyle group is, in this paper, defined as a group of individuals, living in Flanders, with similar characteristics regarding aspects of behaviour, personality and values relevant for their actual and ideal housing environment¹. Similar demographic or socio-economic aspects can appear but are not necessary to define a lifestyle-group. The lifestyles are operationalised in four subdimensions: economic capital², openness³ or cultural capital, (un)safety⁴ and ecology⁵. These subdimensions are extracted from recent research

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¹ Compared to the theoretical frame of Cathelat, psychographic as well as mechanistic and poststructuralistic approaches are used.
² Economic capital as defined by Bourdieu (possession of money, property, …). Status symbols are patterns of behaviour or material or immaterial expressions of one person or a group trying to take a certain position in that group (Stultiens, 2004).
³ Openness refers to one of the five personality traits of the Big Five. The five factors are Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (OCEAN). Openness is a general appreciation for art, emotion, adventure, unusual ideas, imagination, curiosity, and variety of experience (Gosling, 2008).
⁴ The complex dimension of (un)safety has four subdimensions: degradation of the neighbourhood, road safety, theft and contact with strangers.
projects looking for the factors driving demand preferences for different housing environments (Devogelaer, 2002 / 2004; Verhetsel et al, 2003; Pelfrene, 2004; De Corte et al., 2003).

**The central hypothesis of the research on lifestyles is that a relation can be found between the housing environment and the lifestyle of the residents.** This hypothesis has been inspired by the ideas of Wirth in “Urbanism as a way of life”, published in the American Journal of Sociology in 1938 (van der Wouden en Kullberg, 2002; Sennet, 1971; Van Kempen, 2003), Bourdieu (1984) in “La Distinction” and the more recent theories of Amos Rapoport (1969, 1976, 2001), one of the founders of the Environment-Behavior Studies (EBS).

“It is implicitly accepted that there is a link between behaviour and form in two senses: first, in the sense that an understanding of behaviour patterns, including desires, motivations, and feelings, is essential to the understanding of built form, since built form is the physical embodiment of these patterns; and second, in the sense that forms, once built, affect behaviour and the way of life.” (Rapoport, 1969:16)

Finally, the ‘Value stretch model’ (Kipnis, 2004) is used to assess the friction between the lifestyles of the respondents, their actual housing environments and their ideas about their ideal housing environments. Several aspects can cause this friction: affordability, availability,… Only frictions related to the supply of housing environments will be taken into account. The range in supply of housing environments is realised by the ‘encoders’ of lifestyles: developers, spatial planners, urbanists,… The aim is to suggest new roles for these encoders and to create concepts for new or older housing environments.

**Planning discourse of open space as public space**

In the past public space policy was mainly oriented towards central urban locations (Mvg, 2004). In network society, this central public space looses its prominent role as meeting place and place of exchange (Sennet, 1977).

In 2007 Leinfelder, inspired by the three alternative planning discourses on the relation between city and countryside by Hidding, Needham and Wisserhof (1998), launched the idea of the planning discourse of open space as public space. He focuses on the change in perspective: ‘city in countryside’ becomes ‘countryside in city’. In a context in which almost the entire Flemish area is ‘urban’, he suggests that open space fragments seem to be able to politically fulfil a role as public space.

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5 Different academic research projects have shown that, specifically for ecology, the relation between attitude and values on the one hand and ecological behaviour on the other hand is very limited (Spaargaren, 2003; Federaal Wetenschapsbeleid, 2007).
Focus on peri-urban areas in Flanders: the south of Ghent

In this paper the focus is on a peri-urban area in Flanders, using a selection of statistical sectors situated in the rural and urban parts of the urban area of Ghent. Ghent is the second largest urban area in Flanders. The case study area is situated in the southern part of Ghent and in the communities of De Pinte, Merelbeke and Gavere. In 2002 the delineation process of the urban area was completed. In 2005 the Flemish government approved the spatial implementation plan for the urban area of Ghent.

Fig. 1: future structure of open areas in and around the urban area of Ghent (MvG, 2002, map 11.)

Map 1: situation of the case study area.

The four communities are all different in relation to the urban-rural perspective. The city of Ghent is of course the centre of the urban area, although the western part of the community (Drongen) is considered as rural. De Pinte, a typical Flemish suburban community with a small older village centre surrounded by suburban allotments, is considered as being a part of the urban region. In between De Pinte and Ghent the Flemish authority aims to realise a park and forest for the urban dwellers. Only the northern part of Merelbeke, with the main village centre, is urban. A historical residential ribbon pattern surrounded by suburban allotments connects this main village to the city centre. The southern part of Merelbeke, characterized by smaller villages and agricultural land, is rural. Finally, Gavere is a rural community with several villages at a larger distance of the city of Ghent.

We can notice in the case study area a transition from a more urban part in the north towards a more rural part in the south, but the inhabitants of the communities involved however experience the boundary of the urban area as very artificial since the differences on the field between the urban and the rural areas are not explicitly visible.

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6 The distance between the city halls of Merelbeke, De Pinte and Gavere and the city centre of Ghent is 10, 11 and 20 kilometres. Without traffic congestion it takes approximately 16, 17 or 22 minutes to reach the city centre of Ghent by car.
Research questions

The four specific research questions elaborated in the paper are:
which morphological patterns are present in the peri-urban areas in Flanders,
which housing environments can be identified,
in which lifestyle groups inhabitants of the cases study area can be categorised,
and finally is it possible to verify an urban-rural dimension in the morphological patterns, the housing environments or the lifestyle groups.

Morphological patterns in the area

To analyse the morphological patterns in the area, GIS is used. GIS offers the possibility to distinguish patterns in the chaos of the Flemish peri-urban areas and to learn about the characteristics of the Flemish housing environments.
Map 2 shows all the built elements in the selected region in the south of Ghent. It is clear that it is a very densely populated area with built elements scattered all over and without any large open spaces. This pattern is characteristic for the major part of Flanders and is often called urban sprawl or network urbanity. It implies the loss of a clear boundary between urban and rural areas. What remains is a hybrid and vague spatial structure.

Map 2: built elements in the case study area.
Map 3: situation of the urban area and different morphological patterns.

At first the urban area of Ghent can be delineated, making use of the boundary set out by the Flemish Government. It demarcates normatively the urban area, where an urban policy must be pursued. Secondly the village centres and large residential areas can be marked. These are statistical sectors which are indicated as residential by the Belgian National Institute for Statistics (NIS). What is left is the ‘open space’, which is however far from open nowadays. Although it is difficult to see patterns in the chaos on the map, a texture of ‘ribbons of buildings’ and ‘dots of buildings’ is present. With GIS-techniques it is possible to extract and simplify these patterns. By setting out buffers starting off from buildings, parts of roads can be selected. When the road-parts are more than 200 meters long, they are held back and defined as ribbons. This method is shown in figure 2.

Fig. 2: Selecting ribbons of buildings using buffers in GIS.

What is now still left are scattered built elements. Sometimes they are completely on their own, often they form a group, a ‘dot of buildings’. By the use of buffers starting off from the remaining buildings they can be merged together in such dots. These dots are also shown on the map 3.
The four elements – urban area, residential cores, ribbons and dots – give an insight in the morphological pattern in the region south of Ghent. It appears that some parts of the study area are more characterised by ribbons, while others are characterised by dots or by a mix of both.

Another way to learn about the morphological configuration of the study region is to calculate the density of built elements (shown in map 4). It gives an aggregated view of the morphological pattern in the area. By this method it is easy to distinguish the densely built statistical sectors from the more open ones. Again, the urban area of Ghent can be clearly recognized. The rest of the case study area shows an apparently heterogeneous pattern. What attracts attention is the more densely built strip of sectors stretching out from northeast to southwest, adjacent to strips of low density. What is also striking are the more densely built sectors in the west of the study region.
Map 5: influencing factors for the building density.

Map 5 shows a few apparently influencing factors. At first the valley of the river Scheldt seems to play a significant role. It forms the explanation for the central nearly unbuilt area. A second factor is the topography, it is very clear that the densely built strip is situated on the higher eastern ridges of the valley of the Scheldt. A third influencing factor is the road network; some roads are historical connecting roads with a development of houses and villages alongside. For the densely built sectors in the west of the study area, no explanation is given yet. It seems that these sectors contain recent residential allotments which have no connection to the landscape or historical structures.

**Housing environments in the area**

Different types of housing environments are described by using cluster analysis based on available data\(^7\), related to three of the four sub-dimensions of the research: economic status, openness and ecology. Datasets in relation to the concept of societal safety are not used yet because of the invalidity of these data when used at a lower statistical level.

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\(^7\) The datasets related to the concept of economic status are the built-up area per inhabitant, the number of cars per household, the average age of the cars, the average and the interquartile coefficient of the income of the inhabitants. The datasets related to the concept of openness or cultural status are the spread of the income of the inhabitants, the amount of non-residential buildings, the percentage of Belgian inhabitants. A dataset on the public transport is used in relation to the concept of ecology. In the future more datasets related to the conceptual frame will be used, depending on the availability and accuracy of the data.
Map 6: different housing environments in the case area.

At the Flemish level seven housing environments are distinguished making use of available datasets.

The following table describes the characteristics and location of the seven housing environments in Flanders and in the southern part of Ghent, the case area.

<table>
<thead>
<tr>
<th>Label</th>
<th>#</th>
<th>Characteristics</th>
<th>Location in Flanders</th>
<th>Location in the case study area</th>
<th>Field work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very exclusive residential neighbourhood</td>
<td>28</td>
<td>- Very high incomes and large houses</td>
<td>At the fringes of the largest cities of Flanders and Brussels</td>
<td>2 areas in the case area. Very idyllic areas with a low housing density.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- A significant representation of foreigners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Limited public transport</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Monofunctional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive residential neighbourhood</td>
<td>116</td>
<td>- High incomes and large houses</td>
<td>At the fringes of the largest cities of Flanders and Brussels</td>
<td>6 areas in the case area. All very close to the boundary of the urban area.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- A significant representation of foreigners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Limited public transport</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Monofunctional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Villa parks in the fringes of the cities</td>
<td>389</td>
<td>- Relative high income and a high number of cars per</td>
<td>Scattered over the central, more urbanised part of Flanders, but still a relation to the cities</td>
<td>Different areas close to the boundary of the urban area.</td>
<td>Yes</td>
</tr>
<tr>
<td>and in the sprawl areas of Flanders.</td>
<td></td>
<td>household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Characterised by a few other functions beside housing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Relatively large houses</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For a few statistical sectors (indicated in the white colour) some of the datasets are incomplete so it was impossible to take them into account for the clustering analysis.
<table>
<thead>
<tr>
<th>Housing Environment</th>
<th>Population</th>
<th>Characteristics</th>
<th>Location</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>City centres</td>
<td>981</td>
<td>Lowest incomes, small houses. Often dominated by other functions besides housing. Very good public transport and few (and older) cars. A significant representation of foreigners.</td>
<td>In the older centres of the Flemish cities</td>
<td>In the northern part of the case study area, related to the city centre of Ghent.</td>
</tr>
<tr>
<td>Rural housing environments, often in between village centres</td>
<td>2186</td>
<td>Moderate income but lower than the village centres. Small houses. Good public transport. Characterised by other functions beside the housing. Small number of cars per household.</td>
<td>In the more rural parts of Flanders</td>
<td>Dominant in the southern, rural part of the case study area</td>
</tr>
<tr>
<td>Rural housing environments, often old village centres</td>
<td>2342</td>
<td>Moderate income. Good public transport. Characterised by other functions beside the housing. Small number of cars per household.</td>
<td>In the more rural parts of Flanders</td>
<td>Dominant in the southern, rural part of the case study area</td>
</tr>
<tr>
<td>Mixed housing environments in the fringes of the cities and in the sprawl areas in Flanders.</td>
<td>1160</td>
<td>Moderate income but higher than the village centres. Moderate public transport. Characterised by some other functions beside the housing.</td>
<td>Scattered over the central, more urbanised part of Flanders, but still a relation to the cities and with bigger villages.</td>
<td>Different areas in the case study area, as well in the more urban as in the transitional parts</td>
</tr>
</tbody>
</table>

Table 1: characteristics and location of the seven housing environments.

Students of the master in urbanism and spatial planning at Ghent University did some fieldwork in five of these clustered neighbourhoods in the southern part of Ghent. They analysed the morphological pattern of these areas focussing on the four theoretical concepts of the research. Due to the fieldwork it is possible to give a more elaborated description of all of the four dimensions or concepts in five of the cluster neighbourhoods.

**Villa parks in the fringes of the cities and in the sprawl areas in Flanders.**

These are residential neighbourhoods, villa parks with a high economic status and a low openness and rather low ecological consciousness.

Based on the fieldwork in the area ‘Drie Sleutels’ we can assume that the concept of safety is very important in these kind of neighbourhoods. Half of the respondents declared that they have secured their homes against theft. A lot of the building lots have impressive garden gates and fences.
High status
The houses in the villa park have different architectural styles and reflect the style and higher economic status of their inhabitants. Even the gardens reflect the status of the owners. The majority of households in the case study area own two or more cars. There are no parking lots in the public area. All the cars are parked on the private lot, mostly in large private garages.

Low openness
The villapark is open to everybody, but at the entrance of the park there all a lot of indications that visitors are not really welcome and should at least adjust their driving speed. In demand of the local inhabitants the ‘passing roads’ are blocked with bollards so that only visitors with a real relation to the park will enter.
Low ecological consciousness and ecological behaviour
The villa park only has public transport at the borders of the area. There is only one house in the case area with a (visible) installation for the production of green energy. Despite the larger gardens in the area, the ecological value of the artificial greenery is rather low.

City centres
These are urban environments dominated by multiple land use with a low economic status and a very high openness and high ecological consciousness.

Based on the fieldwork in the area ‘Galgenberg’ we can assume that the concept of safety is not so important in these kind of neighbourhoods from the point of view of the inhabitants. They declared that they do not feel insecure in their neighbourhood and did not secure their houses. The neighbourhood looks very insecure however from the point of view of the visitor. Indicators of danger are the many places without street lighting, graffiti walls, disused buildings and vacant houses, … Figures on crime show that these central urban areas often have more crime offences than more rural areas.
Low (and high) status and high openness
In general these kind of areas are characterized by a lower economic status. In the area ‘Galgenberg’ however we can discover the complete spectrum of status, from older neighbourhoods dominated by migrant or student populations towards recent or more central neighbourhoods with characteristic mansions and luxurious apartments. The shops differ from small nightshops with exotic products to design and artshops. Because of the diversity in housing types and land uses, age, economic status and ethnic background of inhabitants, we can assume that the openness in the area is significant.

High ecological consciousness and ecological behaviour
The neighbourhood has an excellent public transport service and one of the most important cycle routes of the city crosses the area. The bikes are very visible in the area, on a lot of places inhabitants stall their bike on the footpath, close to their houses. On the other hand the area is dominated by parking places all over the public domain, mostly used by visitors of the city centre. But the majority of the respondents have no private car, inhabitants who own a private car often rent or own a private parking place in one of the many car parks. There is no public green area in the neighbourhood but there are several parks at walking distance. A lot of inhabitants reveal their ecological values by posters on their windows.
**Rural housing environments, the village centres or the areas in between village centres**

These are more rural environments, although they are sometimes situated close to the city boundary, dominated by multiple land use, varying between community-centres with local services at the one hand and more agricultural areas with the typical Flemish ribbon development and rural houses at the other hand. They have a moderate economic status and a moderate openness.

Based on the fieldwork in the area ‘Merelbeke’ we assume that the concept of safety is not so important in these kind of neighbourhoods, except for the aspect of traffic safety. These neighbourhoods often have ancient paved roads crossing, with older houses and shops along. Recently a lot of these roads were redesigned, especially in the village centres. In between the centres problems with exaggerated or maladjusted driving speed occur.

**Mixed status and mixed openness**

The keyword for these neighbourhoods is diversity. This diversity is for example shown in the building types (18% apartments, 39% rowhouses, 28% semi-detached houses and 15% single-family detached houses), in the built area of the houses (from very small to very large) and in the age of the houses (20% built before 1945, 44% built between 1945-60, 19% built in the sixties and seventies and 17% built after 1980).

The inhabitants have different household profiles, incomes and ages. One striking thing is the low percentage of foreigners. These are areas where a majority of native Flemish people live.

**High ecological consciousness and behaviour**

Based on the low car ownership (40% of the households owns no car, only 14% possesses two or more cars), the available public transport, the dominance of bikes and installation for the production of green energy in the street scenery, we can assume that these are areas with a potential for a high ecological consciousness and ecological behaviour.

**Mixed housing environments in the fringes of the cities and in the sprawl areas in Flanders**

These are residential areas, with an economic status that is higher than the typical rural and urban neighbourhoods, but lower than the villaparks and the exclusive neighbourhoods. Other activities, besides the residential activity occur, but are not very frequent. They have a moderate openness.
Based on the fieldwork in the area ‘Flora’ we can assume that the concept of safety is relatively important in these kind of neighbourhoods. Entering the neighbourhood signs inform on the local information network. This is an initiative from local residents in cooperation with the authorities, to watch out and report every inconvenience in their neighbourhood. It is not clear if the local information network is started as a reaction against former problems (burglaries, car thefts, …). After entering the area some individual houses have security systems, the majority however seem to be very at ease.

Low ecological consciousness and ecological behaviour
In the -neighbourhood the ecological consciousness seems rather low. An incineration plant is situated right next to the neighbourhood and causes local environmental pollution. Despite this, the number of houses in the area has recently increased. People living here, need a car for shopping, working, … and the cars are rather dominantly present in the street view.

Moderate status and low openness
The neighbourhood is characterized by a moderate status. It seems as if this is a neighbourhood for the middle class, searching for residential areas which resemble the villaparks but are less expensive and exclusive.
The openness is rather low. The neighbourhoods are mostly residential, other land uses are rare. The sign at the entrance of the neighbourhood makes clear that people living here do not wish to see too many ‘strangers’, meaning people who do not live in the area itself. The street plan, with numerous cul-de-sacs or closes, consolidates this idea.
Lifestyle groups in the area

During the first months of 2009 the students of the master of urbanism at Ghent University interviewed a representative group of inhabitants (30-40 inhabitants per area, 4 areas) on their lifestyle-patterns. Based on the results of the interviews different lifestyle groups can be described.  

The inquiry consisted of questions on economic status, openness, importance of societal security and ecological values. Some questions were related to the values and attitudes, others referred to actions of the respondents.

<table>
<thead>
<tr>
<th>Values/attitudes</th>
<th>economic status</th>
<th>openness</th>
<th>security</th>
<th>ecology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Villa parks in the fringes of the cities and in the sprawl areas in Flanders.</td>
<td>16%</td>
<td>58%</td>
<td>90%</td>
<td>82%</td>
</tr>
<tr>
<td>City centres</td>
<td>39%</td>
<td>68%</td>
<td>79%</td>
<td>82%</td>
</tr>
<tr>
<td>Rural housing environments, the village centres or the areas in between village centres</td>
<td>27%</td>
<td>64%</td>
<td>86%</td>
<td>93%</td>
</tr>
<tr>
<td>Mixed housing environments in the fringes of the cities and in the sprawl areas in Flanders.</td>
<td>54%</td>
<td>58%</td>
<td>90%</td>
<td>92%</td>
</tr>
</tbody>
</table>

Table 2 indicating the percentage of respondents who considers the values mentioned in the first row as important or very important.

The inhabitants of the city centres\textsuperscript{10} consider the value ‘openness’ as most important, security is not so determining for them and they do not wish to achieve a high economic status. Ecology is important but other groups have a higher score for this value. These values are reflected in their actions because they have not secured their homes and the majority is an enthusiast user of public transport or goes to work or school by foot or by bike. Their openness score (Gosling, 2008) is the highest of all respondent groups. Respondents living in the villa parks value security highly, the other values are not so important to them. Especially the low value for economic status is striking comparing to their

\textsuperscript{9} During the following months an internet-inquiry will be launched to build a new dataset on lifestyle-related aspects of 2000 Flemish inhabitants.

\textsuperscript{10} 50% of the respondents were students.
neighbourhood. They score the lowest on openness. The major part of them secured their homes.

People who live in the mixed housing environments, the villa parks for middle-incomes, have the same value pattern as those living in the more exclusive villa parks, regarding to security (very important) and openness (not so important). They differ on the value of economic status, which is obviously very important for the inhabitants of the mixed housing environments. Their score on openness is moderate.

Finally, the inhabitants of the more rural parts of Flanders, value ecology most of all respondents. Half of them goes to work or school by bike or foot or uses public transport. It is rather important for them to be open to other social and cultural groups.

The differences between the respondents living in different neighbourhoods and the positive interaction between inhabitants and housing environments are striking. It seems as if the value and action patterns of the inhabitants correspond very well to the characteristics of their housing environments, with one exception: the high economic status of the (houses, gardens, cars, … in the) villa parks versus the low personal appreciation of economic capital of the inhabitants.

**Conclusion**

In this paper the peri-urban area of Ghent is analysed, using different techniques and from different view points.

Using GIStechniques, different morphological patterns were described. The urban-rural dimension is not very dominant in the different GIS maps. Focussing on the building density, it is possible to see an urban-rural gradient. The distinguished morphological patterns are more related to other influencing factors, such as the landscape or historical roadstructures. Relating to the analysis of housing environments 6 of the 7 housing environments, on a Flemish level, are presented in the peri-urban case study area. The urban-rural dimension was not very dominant in the analysis, more important were the differences between purely residential areas and areas with a small or larger amount of other functions and differences between the status of the neighbourhoods. Some neighbourhoods, especially the more residential neighbourhoods with a higher status, are related to the typical urban sprawl areas in Flanders, and are not situated in more rural areas.

The technique, used for the lifestyle analysis, does not allow to make general conclusions but in the case study areas the resemblance between the characteristics of the residents and their neighbourhoods was striking.

Finally it is possible to say that the morphological and societal differences between the urban and the rural areas in the peri-urban area of Ghent are difficult to discover, although different techniques for analysis were used.
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