1. A mine of information
This atlas is like a detailed photograph album of the Brussels regions. The "story" was written by
the General Socio-Economic Survey in October 2001. The information then had to be made clear
by a kind of "photographic development" process, which produced a picture of the social and
health situation of Brussels' population, right down to the level of the individual city districts.
The General Socio-Economic survey is a valuable source of individual pieces of information
relating to all aspects of life. This kind of information only becomes available to us every 10
years and it is not certain that in the future this kind of data gathering will still be possible. That is
why the Brussels Social and Health Observatory felt that it was most important to make the most
of this opportunity to draw up an atlas in collaboration with a number of University teams as soon
as the data became available.
The purpose of this atlas is not so much the examination of each aspect individually, but rather
the best possible summary of the various aspects. Although this document is intended for the
general public, we are aware that it will still require some effort to understand it clearly. For this
reason a guide on how to read it (Section 2) has been included. The atlas should therefore be seen
more as a reference work or reference photograph album.
The Brussels Social and Health Observatory is not the only body which was interested in making
the mine of information which is the General Socio-Economic Survey available to the general
public. The Brussels Institute for Statistics and Analysis has recently published an “Atlas of the
Districts of the Population of the Brussels-Capital Region at the beginning of the Twenty-first
Century”. Both atlases are complementary [1]. Further atlases and monographs will become
available in the future and will flesh out the information presented in these atlases of Brussels.
This atlas of health and society brings together the various maps dealing with the demographic,
social and health situation of the population of the Brussels region. Each map describes the
various areas of one aspect of everyday life. It describes how the people of Brussels are housed in
the various areas of the city, in which districts large families live and in which there are mainly
single individuals, the breakdown by age of the population of the different districts, where
students, workers and the unemployed live, how their incomes are distributed, how people
themselves in the various districts see their state of health, how highly qualified people are
distributed throughout the city and how people with few qualifications are spread, how the people
of Brussels see their environment and many more such matters.
It describes the diversity to be found within the Brussels region. It creates a picture which is a
mosaic of an international, dynamic, bustling and wealth-generating city, but also one in which
wealth and poverty stand face to face in stark contrast.
Of course, the atlas has limitations. Some of the limitations derive directly from the possibilities
offered by the General Socio-Economic Survey (census). Not all important aspects of the social
and health situation are included in the census. There is, for example, no information on the
complex multilingual and institutional context, even though this could be important for
education, the employment market or health care. However, we do find for the first time in the
2001 census information regarding the way the people of Brussels see their health and their level
of satisfaction with their environment. This is why an entire section has been devoted to these subjects.

The census provides information only about the populations registered in the National Population Register (see also section 2: Reading Guide). This means the true population is not actually covered.

The management of a survey covering the whole of the population demands an enormous amount of time and the collaboration of a number of partners. The explains the period of time (5 years) which passed between the survey itself and the publication of this document, a period which seemed excessive to some. However, the characteristics of the population and the way it is distributed within the Brussels area only change very slowly over time and the information provided by this atlas is still highly representative of the current situation.

[1] While the Atlas produced by the Observatory mainly places the emphasis on summarising the social and health characteristics of the various Brussels districts, the "Atlas of the populations of the districts of the Brussels-Capital Region at the beginning of the twenty-first century" contains detailed maps of numerous demographic and socio-economic variables considered separately. The distribution in space of the various nationalities and their mobility in respect of changing their homes are also given in greater detail.

2. Changes in the structure of the population

The population of Brussels is very varied. This diversity in the current population is a result of demographic, urban and socio-economic processes which started during the previous century. However, certain recent developments are also decisive in the makeup of the population of Brussels which is in many respects different from the rest of the country.

In 1991 the age distributions of Belgium and the Brussels region were similar. But in the wake of the continued rejuvenation of the Brussels population and particularly of the faster ageing of the rest of the country we now see that the age structure of Brussels is the youngest in the country. The Brussels regions are characterised by a considerable over-representation of young adults and young children. This is explained by a high birth rate connected to the presence of a large number of young adult immigrants of child-bearing age and by the fact that in recent years more families with children – particularly of non-European origin - have stayed living in the city.

Currently in the Brussels region the problems connected with the ageing of the population are above all related to the Belgian population (the over-eighty age group is still almost exclusively Belgian). Over the coming decades this situation will change radically. The poor state of health of people with an immigrant, working-class background will become a serious challenge for the Brussels region.

The expansion of the suburbs – suburbanisation [2] - which was happening during the sixties never really stopped. Since that time the Brussels-Capital Region has recorded a continuous loss of residents to the rest of the country. This loss has been offset to a large extent by the arrival of migrants from abroad. Despite this, the migration balance remained negative for a considerable period of time. The situation only changed in 1999 when the positive balance of international migration outstripped the negative national migration.
The overall effect of these migratory movements amplifies year on year the international and multicultural character of the capital, with an ever-growing range of countries of origin. If the original nationality is factored in (previous nationality or parents nationality), 46.3% of the people of Brussels are of foreign origin.

Within the Brussels region a wide range of different types of household exist. By comparison with the rest of the country, there is an over-representation of one-person households, but there is also a higher proportion of households containing more than 6 persons. This wide diversity is explained by urban factors specific to the city, such as the arrival of young, single adults setting out on their professional careers, and by a large range of cultural models.

[2] Suburbanisation: the process whereby the urban population leaves the centre of the city to seek housing at the edges of the city where accommodation is more comfortable and less expensive.

3. The inertia of socio-economic spatial structures

Despite the changes in the makeup of the population, this atlas reinforces to a large extent the frequently described socio-economic spatial structure, for example in the first report published by the Brussels Social and Health Observatory, “Poverty and at-risk districts” [3]. Most of the maps in this atlas reflect spatial structures which have developed over the course of history. The social differentiations in space as shown by a canvas formed of concentric zones and east-west opposition are seldom disrupted (see map 1-02 on the back cover flap).

Today’s city, the legacy of the past

The historical structure reflects first of all a concentric structure which is the result of the way Brussels grew, steadily taking over peripheral rural spaces and former village nuclei and building them into the urban structure. The central pentagon defines the historic centre of this structure and corresponds to the mediaeval city limits (map 1-02 in the back cover) The city steadily grew beyond the original city walls which nowadays are to be seen as the boulevards of the internal Ring-Road (“Petite ceinture”). The first suburbs began to develop, such as the working-class districts towards Molenbeek and the middle-class districts towards the Leopold and Avenue Louise area. They formed a first circle of city growth, marked off to a large extent by the loop of large boulevards to the east (Avenue Churchill, Boulevards General Jacques, Louis Schmidt, Saint-Michel, Brand-Whitlock, Reyers and Lambermont) and the arc of the railway line to the west. By 1930 this initial ring was to be completely urbanised. A second ring was to develop beyond the first and would reach the limits of the Brussels-Capital region towards 1960. The main actor of this peripheral growth was the movement of the Brussels upper-middle class from the city centre to the furthest suburbs, attracted by larger housing available there. Luxurious though it often was, most accommodation in the centre was small apartments, not suitable for families. These departures from the centre were accentuated by large scale city-planning operations, such as the Nord-Midi railway station junction and, after World War II, the considerable growth of the number of office buildings. Brussels and London are the two European cities which most clearly feature a central business district devoid of residents (east of the pentagon, the Leopold –Schumann area and the northern district).
The extension of the far periphery of the city, powered by significant sections of the upper and then upper-middle classes, was sustained by policies promoting access to private property. Public authority housing has been less developed than in other countries. It often took the form, starting from the inter-war years, of “garden housing estates”. Conversely, large blocks of flat are relatively less common, unlike the French situation where the rent-controlled housing perimeters which surround the cities are evidence of the unsatisfied housing needs which built up before the war and the urban explosion which took place during the years following World War I. In Brussels the districts containing public-authority housing are of limited extent (see map 4.07 in the flap of the front cover). They are mostly located about the second ring road, which at the time they were being built was the end of the built-up area. Because of this they have become spaces with unusual features in respect of their immediate environment and they are often very obvious on maps because of the fact that the socio-economic differences between their inhabitants and those of the districts directly adjacent are very large.

This concentric (and chronological) structure of the city is reinforced by divisions in quadrants, connected to the socio-economic segregation which has been inherited from the history of Brussels. For example, the initial site of the port of Brussels was responsible for a development structure where the most highly valued positions were to be found towards the east. The eastern side, with the marked relief, thus established the installation of the aristocracy, in the direction of the Duke's palace. In the nineteenth century the first upper-middle and upper class suburbs extended along the plateau, then in the direction of the Bois de la Cambre and the Forêt de Soignes. Today the expansion around the city still continues outside the regional limits, with more marked penetration in Walloon Brabant, for linguistic reasons as much as anything.

The most densely populated districts were historically in the western area which was swampy because of the very gently slope towards the west. The broad alluvial valley of the Senne (map 1-02), has always been home to the poorest sectors of the population, and then to the industrial zones. The fact that the population of the traditional Brussels working classes steadily fell in number, the housing that was left by the middle and upper-middle classes deserting the central areas, and the limited destruction during the wars gave rise to an old-fashioned environment, of detached or small terraced houses to be rented out to the most at-risk populations at the edge of the central business district, and particularly to the north, west and south of it. The presence of two large passenger railway stations (Midi and North) (map 1-10 in the front cover) also favoured the establishment at the ends of the crescent of a precarious population of newcomers, initially from the rural part of the country, then foreigners from poor countries. From the nineteen-sixties, with Brussels' industrial decline, the old worker homes, often decayed but financially affordable, were little by little occupied by a population which was in a larger part, immigrant and unqualified. These groups had little chance of taking their professional place in a city which was developing its tertiary sector. Brussels, as other Belgian cities in fact, was relatively unfamiliar with the concept of the fixed-rent and suburban property inhabited by the poorest sector of society. As for the middle-classes, while some apartment blocks may have been built for them in the districts of the second loop in the decades following the war, this was never more than a minority phenomenon compared with the building of single-family houses.

The combination of the contrasted situations which appeared in the early centuries of the development of the city, and the mechanisms used to produce and reproduce urban space are the
source of today’s marked social/spatial confrontations. This has meant that the prestige axes and districts were to be built mainly in what we can call the south-east quadrant and the east of the region (Avenue Louise, Avenue de Tervuren, the Squares district) while the more working-class districts would be to the west, in the valley where the absence of rapid urbanisation and the proximity of the canal favoured the growth of industry in the industrial revolution. This industrial axis developed along the canal and reinforced this historical confrontation in that it formed a physical barrier between the west and east of the Region. The axes of the railway lines also helped to break up the space in that they also formed barriers of differing degrees of penetrability. This is particularly so in the case of the West Station, located on the railway belt intended for freight transport, where it marks a very clear division between upper and lower Molenbeek and creates an internal confrontation within the municipality between the more working class districts in the lower area and the better-off (and more recent) areas to the west.

[3] This work came out in 2002 and is usually called “The Atlas of At-Risk Districts”, by Prof. C. Kesteloot.

The situation regarding green space has also been determined by historical development and has a significant effect on the distribution of the various population groups in space. The 2001 census produced for the first time detailed information relating to areas on the degree to which green space was appreciated by the inhabitants. The confrontation between the old, densely populated part of the city and the rest of the region is very obvious (map 8-03). The lack of green space accessible to the public within the first circle is particularly dramatic. This is the area where children are in greater numbers, private gardens are rare, accommodation is more densely populated and the environment in general less appreciated.

In the west of the second ring, however, green spaces clearly have a social part to play: the proportion of the population with access to private gardens is low, but satisfaction with green spaces is high because of the presence of a number of average-sized parks.

But the city may change despite all this
There are very few social/area differences which are not covered by this concentric and east/west confrontation logic. However, despite all this, a few shifts are to be seen. The above paragraphs and numerous maps in this atlas highlight the fact that housing market interventions are the most likely actions to change the current picture.

The major socio-economic indicators show that the districts containing public authority housing in the second ring are different from the surrounding districts. However, in terms of environmental satisfaction, the differences are relatively insignificant. At an equal socio-economic level, the residents of the public authority housing districts demonstrate a satisfaction level altogether higher than that of the residents of the more central at-risk areas. This difference is, however, more marked in respect of green spaces than regarding quietness or cleanliness.

The phenomenon of gentrification can also be observed occurring in a somewhat sporadic manner. This movement whereby a young, single, well-educated population just starting out on a professional career begin investing in certain areas has been in evidence for some twenty years, originally in Brussels, but also occurring in other large Belgian cities. In Brussels gentrification also includes a population of middle-level management or foreign civil servants. This population has been very active in revitalising these areas, even if sometimes it is not actually a highly-paid
group (though possibly untaxed, in the case of civil servants with diplomatic or European status). But the presence of this group of population contributes to the effects of eviction and social division. The areas in question which are for the mostly centrally located are often blessed with a high level of cultural potential and contain a large number of high-quality apartment buildings dating from the nineteenth and early twentieth century. This phenomenon can also be observed, albeit in a rather hesitant fashion, in some of the more western districts (the end of Dansaert street, the maritime district of Molenbeek and elsewhere) which have a large number of industrial buildings which can be broken up into flats. But even more than the west, the signs of gentrification outside the historical core, are particularly to be found in the east of the first ring, mainly because of the presence of the university and European institutions; but also because of the early signs of urban renovation (upper Saint-Gilles, the Saint Boniface area of Ixelles).

Large-scale private real estate projects are also capable of dramatically changing the profile of an area. The zone between the North station and Rogier square (Manhattan) in Saint-Josse-Ten-Noode is a good example. The old houses have been completely replaced by new buildings which have attracted a young, highly-educated population. The over-representation of very comfortable housing in this district is in sharp contract with the poor quality of the property in the neighbouring districts. Contrasts are also very marked for other socio-economic indicators such as average income, unemployment rate and so forth.

The "emergency purchase" or “have to purchase” [4] phenomenon also explains certain deviations from the general logic. This affected the Turkish community in particular which found itself since the 80’s, forced to purchase certain properties in order to be able to continue to live in the district. This phenomenon explains why in certain parts of Schaerbeek there are relatively high numbers of owner occupiers despite the other rather unfavourable socio-economic aspects of the area (see map 4-06, type 2).

Some districts which are mainly inhabited by students have their own special characteristics. (Erasme in Anderlecht, La Plaine in Ixelles, UCL in Woluwe-Saint-Lambert). These are areas which contain a large number of furnished apartments with a population largely absent from the labour market and including a large number of foreigners.


4. Health is closely associated with socio-economic structure

This is the first time that we have health perception data available at a very detailed-scale geographical level which can be cross referenced with all kinds of demographic and socio-economic variables. This provides us with a better understanding of the links between health and the social situation of the people of Brussels. For this reason we have devoted a large section to the analysis of the health perception data.

In the Brussels Region, as elsewhere in Europe, the state of health of the populations is highly related to the age structure and to socio-economic conditions. Since health status deteriorates steadily with age it is logical that there will be a higher proportion of persons in poor health in areas where there is a greater proportion of old people. This initial “raw” approach provides a
better opportunity of viewing the spatial spread of health “needs” throughout the regional territory. But the powerful association between age and health may hide health status differences between the Brussels districts which are connected to other factors. At equal age level, one can observe the health inequalities related to sex, family situation, nationality and the various levels of social status (education, income, housing, social/occupational situation). If all these factors are taken together it becomes obvious that social status explains the greater part of the differences identified between the districts. After factoring in age and sex, the spatial spread of health is a very faithful image of these socio-economic indicators (see maps 1-05 and 9-03).

5. Brussels is not an island

Because of the mandate of the Brussels Social and Health Observatory, the maps contained within this atlas are restricted to the administrative boundaries of the Brussels-Capital Region (19 municipalities). In reality this is only a part of a larger zone which is connected to Brussels. From a geographical point of view, Brussels extends beyond the boundaries of its administrative districts to a considerable degree. Urban activities and hence urban analysis extends beyond the limits of the municipalities. Geographers make a distinction between the morphological city (that is, the more or less uninterrupted built up area) and the suburbs. The suburbs are the areas connected to the city by suburban-style housing and the increasingly suburban character of the workplace. At the functional level the suburban area is urban, but morphologically is may be still rural (Mérenne, 1991). The morphological city and the suburbs together make up the urban region. The census provides geographers with an opportunity to define the city afresh from the morphological and functional points of view [5]. The dynamic of a city cannot be grasped without perceiving the urban region as a whole. Via these 3 maps, we can briefly locate the Brussels region in its wider environment.

[5] The team headed by Prof. E. Van Hecke from the ISEG, KU Leuven, has been working on defining new urban regions on the basis of the 2001 census. This monograph, written at the request of the Federal Scientific Policy and the SPF Statistics/Economics Directorate General will be published in 2007. The maps published below are based on these new geographical boundaries.

Map 1-03
Population density (Urban region).

Map 1-03 shows the urban region of Brussels, and therefore the morphological city (35 municipalities) and the suburban region (26 municipalities). Population density is very high in the city centre (Brussels-Capital Region) and falls steadily as one moves from the Centre.

Map 1-04
Median income per tax declaration (Morphological city) – income 2002.
Map 1-04 is limited to the “morphological city”. We have chosen the median income per tax declaration as an indicator of the socio-economic differences within the city. The map clearly shows that the highest incomes to be found in the districts in the external loop of the Brussels region (see also map 5-02) are to be found to a large extent in the municipalities located outside the Region. Only the Vilvorde canal-zone in Halle and a few districts in the centre of Braine-l'Alleud and Waterloo have median incomes comparable with those in the second loop of the Brussels region. There are no districts in the municipalities located outside the Brussels region which have a median income as low as the one found in the nineteenth century inner-city zone. This contrast can be explained to a large extent by the situation to be found in the Brussels labour market. Only 45% of jobs in the Brussels region are held by workers who live there. A large proportion of the high incomes to be found outside the region are earned inside the Brussels-Capital Region (Statistical indicators, 2005, table IV 2). In districts with a very low median income, a significant proportion of the population live on income substitution benefits (see section 5).

Map 1-05
Health perception data standardised by age and sex (morphological city)

The health perception data differences extend beyond the boundaries of the region

Map 1-05 shows health perception figures for the city after weighing for differences due to age and sex. The statistical districts, where the proportion of the population which sees itself as in poor health is the same as the national average, get a value of 1. In districts where the standardised index is greater than 1, the proportion of people who feel they are not in good health is higher than the national average. The districts have been classified into 5 groups of the same size (quintiles).

The districts presenting the least satisfactory state of health perception are concentrated in the Brussels region. The municipalities in the outskirts of Brussels in general reveal themselves to feel that they are in a better state of health. There is, however, continuity in terms of better or less good health states perceived between the contiguous zones beyond the regional boundaries. In the canal-zone with the railway areas and neighbouring industrial zones, in both the north and south of Brussels, areas where the population sees its health as less good are to be found. In the north, the industrial zone of Machelen in the extension of Haren and several districts marching with Vilvorde up to the Borght just on the other side of the canal, the perceived state of health is lower than the Belgian average. Some districts even belong to the least favourable quintile. South of Brussels some districts are to be found (Drogenbos, Ruisbroek in Woluwe-Saint-Pierre, the industrial area of Halle) which are below the national average, but they are rarely to be found in the least favourable quintile.

The Brussels Region south-east quadrant sectors contain a very high proportion of people who see themselves as in good health. This situation extends towards the east (Tervuren, Kraainem, Wezembeek-Oppem and the south of Zaventem). Sectors are to be found to the south, too, where health is seen as very good, which extend to Braine-l’Alleud, passing through Rhode-Saint-Genèse and Waterloo.
At the western outskirts of the Brussels region, the gradation is very steady. To the north, in Wemmel and Grimbergen is to be found a nucleus of districts with a very high proportion of people who see themselves as in good health. Similar nuclei are to found in Woluwe-Saint-Pierre and Dilbeek. The major observation is that the number of areas with a high proportion of people who see themselves as in poor health is quite small, at least in comparison with the concentrations to be found in the Brussels-Capital Region. There are a few districts near the ring and the Roman roadway which are below the national average. Braine-l’Alleud reveals a clear division. There are some sectors which have a high proportion of people in poor health while others fall in the most favourable quintile.

6. Summary
This atlas maps the huge demographic, sociological and health status diversity to be found in the Brussels region. This has been made possible thanks to the mine of information represented by the General Socio-Economic Survey.

The population of Brussels differs from the population of the rest of the country in a number of ways. The courses of history and recent developments have contributed to a process the outcome of which has been that the population of Brussels is younger and more multicultural than the elsewhere.

Despite demographic changes, the socio-economic structure of the urban space remains unchanged on the whole. This structure is an outcome of the historical growth of the city which has given rise to a concentric appearance with a better-off zone on the outskirts and a more marginalised zone in the historical centre. This concentric structure is found in combination with an east-west confrontation connected with relief and the establishment of industrial zones. The western area has traditionally been more working-class, while the higher classes have established themselves more in the eastern area.

This spatial inertia is interrupted in one or two areas. Processes such as gentrification, the development of student areas, “have to purchase” and large real-estate development projects may lead to local inconsistencies within the general pattern as shown on the map.

Perceived states of health according to district (after weighing for age and sex) closely mirror the geographical socio-economic differences. The cross-analysis of the socio-economic, demographic and health perception characteristics gives a better understanding of the connections between social and health in Brussels.

It must, however, always be borne in mind that social inequalities do not stop at the regional boundary. On the contrary, the selection of the three maps above clearly shows that Brussels is not an island and that only a small proportion of the wealth generated by the city is included in the Brussels Capital Region.

7. Bibliography
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