

Breaking stereotypes

Historical demography in Belgium since 1981 (19th and early 20th centuries)

MURIEL NEVEN

Postdoctoral researcher (FNRS), Laboratory of Demography, University of Liège

ISABELLE DEVOS

Assistant, Department of Early Modern History, Ghent University

INTRODUCTION¹

Twenty years ago, Etienne Hélin (1981 [009]) published an article on the past and the present of historical demography in this journal. This young discipline, born from family reconstitution about thirty years before, was then fast growing, as Hélin demonstrated by the increasing number of publications. Although this keen interest has never disappeared, there were a series of drifts and dangers ahead, which could have paralysed its development. In order to avoid this, in Belgium and elsewhere, Hélin was hoping for computer technology to overcome the two main difficulties of historical demography. On the one hand, the nineteenth century sources, considered too innumerable, or even reserved to pure demographers highly interested in exact sciences, would at last be intelligently and systematically exploited. On the other hand, and both elements are linked, large databases would finally open the doors for (social) differential demography (Leboutte, 1985 [051]). His hopes did not remain unanswered. Thanks to some of his successors, research about the Modern Period has increased enormously during the past two decades. More than half of all Belgian publications in the International Bibliography of Historical Demography (hereafter IBHD) concern the period after 1800.²

¹. Note that references in this text are only examples. For a more complete, but still selective bibliography, see Devos in this issue. References to publications in our text are as follows: (name of author, year of publication, page number, [*number in Devos bibliography*]). So, numbers between square brackets refer to the selective bibliography of Devos. Unnumbered references (such as publications before 1981 and international literature) are not included in the bibliography and are listed at the end of our text.

². Apart from the annual publications of the IBHD since 1978 (Hélin et al., [003]) and a cd-rom in 1996, the database can also be consulted on the internet at: <http://www.ulg.ac.be/hiecosoc/bidh/indexuk.shtml>. However, during recent years the database has not been regularly updated.

Nevertheless, new technologies were far from solving all problems. After family reconstitution, which founded the discipline but also restricted its development, historical demography needed a new lease on life. International literature of the last decades points to three main innovative axes: the diversification of sources, a renewed methodology and the development of a strong interdisciplinarity. These three tendencies have allowed and will allow in the future to open new horizons “*in order to broaden prospects for progress*” of historical demography (Saito, 1996, 553).

The signs noted by Hélin, developed later by Dupâquier (1984) and taken up for the twentieth birthday of the *Société de Démographie Historique* (Perrenoud, 1986), hinted at the more or less latent, and the more or less affirmed crisis of the discipline. We can mention some of the main critiques during this period of self-criticism: focus on the eighteenth century, on rural populations and stable families, on fertility and marriage studies and the excessive use of average values. In short, the nineteenth century remained virtually unknown, the urban world unexplored; migrations were described through stereotypes and processes as important as the fertility decline were studied by demographers rather than by historians, etc. Belgian researches, like others, have faced these shortcomings and tried to fill in the gaps. During the last twenty years, their attempts have been original, thanks to the particularity of their sources from which they have tried to develop some new analyses.

During the nineteenth century Belgium installed a statistical system which served as a model for many European countries. Vital registration – births, marriages and deaths – set up in 1797 and systematized by the Napoleonic Code (1804), together with various surveys (nominative lists, censuses) provided a large amount of data.³ Even if some weaknesses appeared, especially in the years after the installation of the civil registers (resistance of some people to secularisation, hazy definitions of still-borns, etc.), improvement occurred and continued with the advent of the young Belgium which under the leadership of Adolphe Quetelet set the example. The fame of this Belgian scientist, keen on astronomy, mathematics and statistics, crossed borders. He left his mark on the international statistical congresses which he organised between 1853 and 1876 and stimulated the creation in each country of a statistical committee following the Belgian model, in order to collect uniform and coherent international statistics (Brian, 1989). Responsible for this standardisation movement which spread throughout Europe, Quetelet is generally considered the inventor of the modern administrative statistical system (Horvath, 1981 [039];

³. For publications on these sources, see Oris, 1994 [005].

Dupâquier and Dupâquier, 1985; Randeraad, 1995 [024]). The dynamism of this statistical and demographical thought has, nonetheless, been insufficiently studied.⁴ According to the IBHD, between 1980 and 1995, only four Belgian publications were devoted to this topic or to national personalities, such as Quetelet (see table 1). One exception is the recent republication of his *Physique Sociale ou Essai sur le développement des facultés de l'homme* (Vilquin and Sanderson, 1997 [041]).

The originality of the Belgian sources, however, is elsewhere. In Belgium, the *Commission Centrale de Statistique* shed light on the shortcomings of the censuses organised during the French period: they were considered to be mere nominative lists. Quetelet, who was in charge of examining these documents, concluded that a general population census was necessary. Organised on October 16, 1846 and based on a *de facto* population, the census went hand in hand with the opening of a population register in each locality of the country. The principle was simple: each household return counted in the census was written in a register (a page per household). The name, surname, civil status, profession, place and date of birth of each individual were recorded in this new document. The information was gradually completed: changes in civil status (marriage, widowhood), as well as natural (birth and death) and migratory moves (in- and out-migration to and from the parish) were added as they occurred. The population register thus remained 'open' until the next census. Censuses were conducted approximately every ten years.⁵ But between snapshots, observation was continuous. Since 1846, Belgium is one of the few countries (next to the Scandinavian countries, the Netherlands, some localities in northern Italy and, to a certain extent, Japan) to benefit from a longitudinal source, which allows to follow the life course of an individual from birth to death, observing internal migrant moves (within Belgium), the people with whom he or she cohabited during the various stages of his or her life, and every demographic event he or she experienced, from the death of a parent to the birth of a grandchild (Leboutte, 1985 [051] and 1998 [233]; Alter, 1988 [222]; Neven, 2000, chapter 1 [236]).

⁴. A current research project by Eric Vanhaute and Nele Bracke at the department of Modern History at Ghent University aims to investigate the history and the organisation of the Belgian national statistical system. The *Commission Centrale de Statistique*, an important advisory board founded in 1841, and the role of Quetelet, the first president of the commission, is at the core of this project.

⁵. A repertory has been published with a full overview of the territorial history and population numbers of all Belgian municipalities from 1796 to 1963 (Vrielinck, 2000 [038]).

Wealth of data is one thing. Another is to take advantage of them. For twenty years, Belgian historical demographers have either adapted the existing methods to their own sources, searched for methodological innovation in other disciplines, or developed their own tools. Indeed, “*the wealth of documentation and the lack of appropriate methods*” combined with “*lack of staff, of office premises, of credits*” and with “*the bad preservation conditions of contemporary archives*” (Leboutte, 1984, 92-93 [020]) did not paralyse Belgian researchers. On the contrary, they displayed great dynamism, as demonstrated by the main research trends mentioned in this introduction, and as demonstrated once more by this special issue.

Historical demography in our country developed along the lines of the pillars of Belgian history and has mainly followed its periodization. Our article adopts the same structure and sheds light on two main research trends, which in their turn gave birth to numerous branches. The first section is devoted to the upheavals of spatial and demographic structures linked to the industrial revolution. The second is connected to the major demographic event of the Modern Period, i.e. the demographic transition. For our quantitative analysis, every publication in the IBHD on Belgium whatever the period, from Antiquity until now, has been taken into account (see table 1). Our qualitative analysis, however, focuses on literature concerning the nineteenth and twentieth centuries, a sensible chronological limit in the *Revue Belge d'Histoire Contemporaine/Belgisch Tijdschrift voor Nieuwste Geschiedenis*.

1. DEMOGRAPHIC GROWTH AND ECONOMIC GROWTH: STRUCTURES AND PROCESSES

The relations between demographic and economic conditions have dominated most of nineteenth century population history. But which caused which? Malthus and Boserup's theses both have their supporters. In Belgium, Bruneel, Daelemans, Dorban and Vandebroeke (1987 [063]) proposed a synthesis which showed that demographic growth preceded the industrial revolution and prepared it by building, in the words of Marx, 'a reserve army'. The industrial revolution, precocious, rapid and intense, was the way out. From then onwards, the economy controlled or, at least, led demography.

1.1. Urban growth

The industrial revolution changed a mainly rural society into an urban one, but with a strong contrast between northern and southern Belgium. During

the Middle Ages and the Early Modern Period, Flanders was characterised by the presence of large urban centres. The cities of Bruges, Ghent, Malines and later Antwerp made great economic and cultural strides. Flanders and Brabant temporarily lost this feature during the eighteenth century due to the strong ruralisation of economic activities and in particular to the expansion of the linen industry (Vandenbroeke, 1984 [074]). But at the beginning of the nineteenth century this region, with an urbanization degree of more than 30 per cent, remained one of the most urbanized in the world. By comparison, this proportion reached only 17 per cent in Wallonia, barely 10 per cent in most West European countries, 16 per cent in France and 25 per cent in England (Klep, 1981 [143]).

Nineteenth century industrialization did not affect the traditional urban infrastructure, except in Ghent. Ghent experienced a sharp population increase in a very short period: in 1846 the population was more than 100,000 compared with around 50,000 in 1796. The growth was mostly in response to the rapid decline of the rural proto-industry (Vermeulen, 1989, 249 [165]). The city welcomed new textile factories which provoked a head-on shock between the old urban infrastructure and economic modernization, and resulted in miserable housing and sanitary conditions. However, during the second half of the century due to the slow decline of the cotton industry primarily as a result of English competition and insufficient modernization, the net-migration rate in Ghent remained well below that of Antwerp and Brussels (Deprez and Vandenbroeke, 1989, 227 [119]).

Also, in Wallonia the traditional urban network was largely unaffected by the industrialization process, even though the proportion of city-dwellers rose from 17 to 45 per cent between 1831 and 1910 (Eggerickx and Poulain, 1995, 271 [124]). Especially in the Haine, Sambre and Meuse valleys, between the Borinage and Liège, where there was a huge industrial development based on coal-mining and iron-making, urbanization was rapid. During these eighty years the number of municipalities with more than 5,000 inhabitants increased from only 21 to more than one hundred, concentrating nearly half of the Walloon population in this region. Nevertheless, industrialization remained quite traditional in the sense that it did not lead to the growth of modern and large urban centres, but to a conurbation of industrial villages and towns developed around a coal-mine or a factory. Communication routes between these small centres only became populated later and created a much less dense urban morphology than, for instance, the area around Liège where the old town was there to direct migratory flows.

Indeed, the urbanization degree which initially had been the highest in Flanders, evolved in such a way as to narrow the gap between the two regions.

Industrialization in Belgium did not result in the emergence of mammoth-cities. The sharpest increase were in municipalities of 5,000 to 25,000 inhabitants (regional service centres) which in 1784 accounted for 10 per cent of the total population but by 1914 for more than one third (Deprez and Vandebroeke, 1989, 233-234 [119]). People that decided to move clearly preferred localities around industrial centres or medium sized towns. As a result, the population size of small towns increased and a semi-urbanized countryside emerged.

1.2. Overcoming structuralism

The contrast between the north and the south of the country appears clearly in historical literature. Walloon historians have spontaneously directed their research towards industrial towns neglecting the countryside, while Flemish researchers have analysed rural areas in full detail. The spatial structures, directly connected to industrialization, were thus far from uniform, and have mainly been analysed in relation to the transformation of the dominant structures i.e. economic structures.

During the 1980s research was strongly, but not exclusively, influenced by the search for structure, initiated by Pierre Lebrun (1979). Studying economic structures meant studying the variety of urban structures, from industrial centres to tertiary cities, and within these urban types, the variety of demographic structures. The age structures of the new industrial towns were characterised by a bulge at adult ages, due to the influx of migrants (Pasleau, 1998, 314-316 [148]). The sex structures were also unbalanced, depending on the type of industrial activity. Metal industry and, to a lesser extent, mining attracted young male workers, often unmarried. Women were, on the contrary, more numerous in textile cities such as Ghent (Vermeulen, 1989, 253 [165]) and Verviers where more than a third of the jobs were filled by females and where, consequently, one out of two adult migrants was a woman (Desama, 1985, 149 [153]). In the same way, in the traditional urban centres, domesticity attracted female migrants. The Flemish rural areas were predominantly populated by young males working as agricultural servants (Jaspers and Stevens, 1985 [157]; Gyssels and Vanderstraeten, 1986 [155]).

In the early 1990s, some historians tried to overcome this structuralism by changing their focus. They ceased to concentrate exclusively on the pillars of the industrial revolution in order to observe "*l'envers de la polarisation*" i.e. tertiary cities, small and large (Oris, 1991 [147]). Old and established cities like Huy and Mons had different experiences, without, however, being deprived of progress. Their demographic growth was restrained, but trade and

services (education, hospitals and transport) were flourishing, especially after the crisis of 1870-1880. New and small companies, with skilled manpower, emerged but remained anchored within these traditional urban centres (Oris, 1994 [305] and 2001 [072]). They formed the cradle of the ‘second industrial revolution’, much more than centres born with the industrial revolution. In the same way, Brussels, as the new state’s capital and as an administrative and financial centre, also became the most important industrial region of the country in the early twentieth century (De Beule, 1994 [115]). But the increase was primarily concentrated in the suburbs of the city. For instance, at the beginning of the twentieth century municipalities on the periphery of Brussels such as Schaerbeek, Elsene, Molenbeek, Anderlecht and Sint-Gilles appeared among the ten most populated centres in Belgium (Deprez and Vandenbroeke, 1989, 235 [119]). In short, it appears that the main beneficiaries of the nineteenth century urban growth were industrial Wallonia and the Brussels-Antwerp agglomerate (Eggerickx and Poulain, 1995 [124]).

As far as the countryside is concerned, research in the southern part of Belgium has only just started. But already the first studies, as well at an aggregate level (Vandermotten and Vandewattyne, 1985 [140]), as at a more regional level on the wealthy Land of Herve (Neven, 2000 [236]) and the poor East Ardennes (Alter and Oris, 2000 [337]), question the *exode rural*, at least for the nineteenth century. Between 1800 and 1900, some villages became more populated, even if the speed and the extent of their progress cannot be compared to that of the industrial areas. Also, in the northern part of the country there was no rural exodus. Nevertheless, the depression of the rural industry in the 1840s was instrumental in initiating migration from Flanders to the more prosperous provinces of Antwerp, Brabant and industrial Wallonia (Deprez and Vandenbroeke, 1989 [119]). The study of Michel Poulain and Michel Foulon (1981 [318]) showed a regular and sustained increase of Flemish immigrants, particularly for the industrial communes situated closer to the linguistic border and this until the end of the First World War which was an important ceasura for Flemish emigration as Luc Schepens (1973) had discovered before. But, as already mentioned, there was no flight away from the countryside. In the Campine area, for example, more than half of all emigrants stayed in the rural neighbourhood, within a radius of 20 kilometres. The direct loss to urban centres was also limited (Vanhaute, 1993, 67 [139]). Towards the end of the nineteenth century the Flemish population preferred to resort to seasonal employment or to commute to places of new employment. The success of commuting was the result of the intensification of the railway network and the availability of cheap transport passes.

1.3. Changing the look: urban networks and migratory flows

During the 1990s, in order to understand how the different components of spatial structures function within a network, a more systemic approach gradually emerged. In 1992 a seminar gathering about 20 scholars described *Le réseau urbain en Belgique dans une perspective historique* and illustrated the significance of Belgium as a nation of mid-size towns (see, for instance, Hohenberg, 1992 [129]). They tried to analyse the role of and the relations between Belgian towns in terms of rank-size distributions (the so-called law of Zipf) which they borrowed from geographers.

Geography's contribution to historical demography can also be demonstrated by current cartographic methods of presenting data. At the moment, the department of Modern History at Ghent University is constructing an historical GIS (Geographical Information System) for the territorial structures of Belgium which will visualise statistical data at different points in time at different territorial levels, ranging from province to commune, using the historical borders which are valid for the selected point of time.⁶ The first maps demonstrate again that there was no massive rural exodus during the period of industrialization (Vanhaute, forthcoming [076]).

Urbanization is more than the growth in population numbers, it is also the re-organisation of the urban system. In this perspective, a network approach, with functional rather than numerically defined urban hierarchy, has the advantage of structuring migration flows. However, exchanges between Belgian towns are virtually unknown. At the very most, some works mention that "*la mobilité entre une petite ville comme Huy et les métropoles est assez intense que pour contrecarrer l'effet de distance. Il est raisonnable de penser que c'est une communauté de structure économique, de main d'œuvre, d'opportunités en somme, qui l'explique*" (Oris, 1993, 217 [303]). Actually, most studies do not go beyond the simple urban-rural dichotomy, focus is on moves from the countryside to industrial cities, and from rural Flanders to industrial Wallonia.

⁶. This HIS/GIS project (under the supervision of Eric Vanhaute and Tine De Moor) aims at providing a user-friendly web-accessible tool to create free outline and thematic micro scale maps of Belgium presenting quantitative (such as census data on population, agriculture and industry) and qualitative data (such as meta-data on the method of collection, on digitisation and geo-coded object data on territorial history, historical websites etc.) for the period 1796 until the present day. The user will have the possibility to combine this broad selection of attribute data provided on the site with data collected by the user - in exchange for the deposit of the data - hereby creating further opportunities for the establishment of a spatial data archive for the whole of Belgium. For an outline of this project, see De Belder, Vanhaute and Vrielinck, 1992 [046].

Nevertheless, at this level, two important results have emerged. First, the mainly local origin of industrial populations. In the coal-mining and steel-producing basin of Liège, 90 per cent of the migrants of the small towns of Herstal and Grivegnée arrived from a radius of less than 20 kilometres (Oris, 1993, 215 [303]). As for the textile cities, they also had a limited recruitment area, but the process was somewhat different: on the one hand, the Ghent industrials could rely on a pauperised ‘reserve army’ in the industrial suburbs (Dhondt, 1976). Around 1850 more than 65 per cent of all workers in the cotton factories were recruited from the indigenous population (Vermeulen, 1989, 253 [165]). On the other hand, the small population size of Verviers (about 10,000 inhabitants in 1800) prevented recruitment within the city itself; the labour force came from the nearby countryside: nine in-migrants out of ten lived within 25 kilometres. Second, in spite of a more modest demographic growth, traditional centres had a much larger migratory field. For instance, during the second half of the nineteenth century, in Huy and Liège, the recruiting area had to be extended up to 70 kilometres to include the same limit of 90 per cent of the in-migrants (Oris, 1993, 215 [303]). Brussels, as a metropolis, benefited from an even larger recruitment area. Machteld De Metsenaere (1996, 77 [169]) has revealed the driving force of these migrants for the city’s frenchification. The ratio Flemings-Walloons inverted through time: in 1830, 60 per cent of the inhabitants were Dutch speakers; in 1947, they were only 25 per cent. Even in this case, far from the Walloon industrial basins, in-migrants have won, and, in a certain way, natives lost.

By all accounts, these analyses on migrant moves break with several stereotypes. It appears that the picture of the migrant *“hypnotized by the city lights like the sea bird who, after sunset, fly bewildered under the beam of the lighthouse”* has been largely exaggerated (Vandervelde, translated and cited by Moch, 1992, 143). Clearly, the profile of the nineteenth century migrant has to be re-examined and better qualified. The great majority of migrants came from surrounding areas and were thus not exposed to a hostile environment. The studies also distinguish between a foundation phase and a maturation phase through which an industrial population was formed (Oris, 1996 [214]). At first, population growth was maintained by migrations, but later, the rise of natural balance took over. The birth surpluses explain about 75 per cent of the growth of Belgian industrial cities between 1831 and 1910, and the migratory balance only 25 per cent (Eggerickx and Poulain, 1995 [124]). Micro level analyses have confirmed these results (Oris, 1995 [305]; Oris and Alter in this issue). Once again, stereotypes are deconstructed. Indeed, the impact of migrations on nineteenth century population growth was relatively weak. Natural growth seems to have been the driving force, even if it can be explained by a transformation of the demographic structures through migration. Moreover, the distinction is also an important contribution for the development to social

history. During the last phase the growing cohesion of natives and recent immigrants resulted in the formation of a new population, an industrial proletariat.

Both conclusions – the limited migratory field and the two distinct phases of urban growth – allow to challenge the differential demographic behaviour (mortality, fertility and nuptiality) of in-migrants and natives. These issues are also a good vantage point from which to approach the larger topic of the (urban and rural) demographic system and will be discussed in the section 2.

1.4. International migrations: between total history and echoes of the present

Though internal migrations are a particular feature of Belgian studies, they are not the only ones to have attracted attention. On the contrary, the IBHD mentions almost as much publications about international migrations from and to Belgium (i.e. 89 publications against 85, see table 1). However, their nature is far diverse. In this perspective, Anne Morelli's works *Histoire des étrangers et de l'immigration en Belgique* (1992 [297]) and *Les émigrants belges* (1998 [300]) are emblematic. Demography is only one of the concerns, next to economy, politics and social context. These studies come within the scope of total history, but focus on a particular theme. When looking at publications on migrations in the IBHD, this ambiguity also appears. A very recent example is *Les Wallons à l'étranger, hier et aujourd'hui*, edited by Jean François Potelle (2000 [316]), of which demography is not absent, but far from dominant. This is a general trend, closely linked to the need for an interdisciplinary approach. Demography, history, economy, sociology, geography, law and politics are all part of the migratory phenomenon, but their combination permits to clarify its complexity, its causes and its consequences.

Another important characteristic of the studies on long distance migrations consists in their relative conditioning by current debates. During the last quarter of the twentieth century, the migration boom resulting from the demise of the communists states and the economic and political problems in the Third World have become a major challenge for many developed countries. The weak understanding of the present migratory flows stimulates scholars to consider these migrations in a historical perspective. According to René Leboutte and Christian Joppke (2000, 12) “*the current migrations appear to be rooted in the remote past and the most deep-seated mechanisms may have been formed in the depths of history*”. In Belgium the theme has been widely studied, especially because our country has detailed aggregated statistics and micro-data relatively well adapted to the analysis of migration. It is also increasingly more studied, as confirmed in the IBHD (see table 1), and one article in this

special issue (Dillen) is dedicated to it. However, many questions remain unanswered: the trajectory of migrations, relations with rural economy, the familial context, and the demographic system, in other words, the mechanisms and the motivations at work.

From this, two strings of logics emerge. On the one hand, an echo of current debates within social sciences, in particular a reflection of the growing concern about international population mobility. On the other hand, an increasing tendency towards 'total history', so that demography *stricto sensu* is often marginal.

Among long distance migrations, Flemish moves have dominated Belgian research of the past decades. Indeed, Wallonia was never a strong emigration area. During the nineteenth century, Flemings moved to Wallonia, France or overseas, to the United States and later Canada (Jaumain, 1999 [286]). These moves mostly appeared after the collapse of the textile industry around the mid-century. Poulain and his colleagues (2000 [319]) have confirmed this out-migration to France in a recent study. Their analysis was original in the sense that it was based on the chronological and geographical distribution of two sets of surnames considered Flemish. The authors demonstrated how the Flemish patronymes, first limited to the border areas and to Paris, eventually scattered over the northern half of the country and then later to the southwest of France. At first, Flemings favoured the *Département du Nord* where due to the boom of the textile and coal industry there were real employment opportunities. A large number of workers moved permanently to Lille, Tourcoing and Roubaix, described in the work of Petillon (1998 [315]) as a Belgian colony. Border towns grew substantially during this period. For instance, in the border village of Halluin foreigners accounted for 75 per cent of the total population which more than quintupled during the nineteenth century (Lentacker, 1982 [291]). At the end of the nineteenth century, migration towards France became less attractive. Some emigrants experienced xenophobic reactions (Derainne, 1998 [266]). The proportion of Belgians in the whole foreign population of France decreased (Dupâquier, 1991 [278]). Permanent migration seems to have been replaced by commuting or seasonal work. During the last quarter of the century a lot of Flemish workers went to work in French farms and sugar refineries (Woestenborghs, 1993 [334]; Cappon, 1995 [254]). In general, it seems that nineteenth century migration has been associated with economic factors, but recent studies (Oris, 1995 [305]; Leboutte, 2000 [290]) have shown the importance of taking into account the various contexts of migrations (individual initiatives, family strategies, migration policies). In this issue, Kathleen Dillen demonstrates the amplifying role of family networks for migration moves between the textile centres of Ghent and Armentières (France), only 70 kilometres apart.

TABLE 1 DETAILED ANALYSIS OF PUBLICATIONS ON BELGIUM IN THE IBHD⁷

	IBHD			BELGIUM			IBHD		
	1980-84 Abs.	1980-84 Rel.	1985-89 Abs.	1985-89 Rel.	1990-94 Abs.	1990-94 Rel.	Total Abs.	Total Rel.	
1. GENERAL									
11 Dictionnaires, glossaries, encyclopaedia, atlas	22	9.7	14	6.7	29	11.7	5	17.7	
12 Bibliography of historical demography	4				1		5		
13 Past or present state of research in historical demography	2		2		5		9		
14 Studies dealing explicitly with historical demography as related to other sciences	3		3		6		12		
15 Textbooks: works for the general public	1		1		1		3		
16 Former theory: early demographic thought	2		1		3		6		
17 Politics	8		6		12		4		
18 Reprints or translations of classic works							26		
2. SPATIAL DISTRIBUTION OF POPULATION									
21 General	79	34.8	104	49.8	142	57.5	43.9		
22 Geographical aspects of past settlement	1				5		6		
23 Rural, urban, regional populations, mixed populations (town and country)	35		28		14		77		
24 Migrations: short and medium distances; seasonal migration"	17		31		41		89		
25 Nomadism			1		1		2		
26 Migration: long distances	14		27		44		85		
27 Refugees, deportees, compulsory settlements	3		5		6		14		
28 Urbanisation (e.g. origins of metropolitan areas)	9		12		31		52		
3. POPULATION GROWTH									
31 General, monography, synthesis, study of a population as a whole	53	23.3	67	32.1	66	26.7	29.6		
32 Natural increase	13		11		21		45		
33 Population increase from migration	8		11		9		28		
34 Estimates of past population	7		7		9		23		
35 Demographic transition, fall in the birth rate	10		18		11		39		
36 Self-regulation mechanisms	11		8		10		29		
	1		4				5		

⁷. In order to compare with the international analysis of Perrenoud (1986, 261), primary as well as auxiliary entries were incorporated in the table. Consequently, the relative distribution amounts to more than 1.00 per cent. Each publication deals with on average 2.6 themes which clearly demonstrates the multidimensional character of Belgian historical demography.

37 Stagnant or almost stationary populations	2	2	2	2	6	
38 Depopulation and population decline	1	6	4	4	11	
4. MORTALITY	103	45.4	78	37.3	78	31.6
41 General: Life expectancy age-specific mortality (including life tables), seasonality	17	10	13	40	17	
42 Prenatal mortality and perinatal mortality	4	6	7			
43 Infant mortality	17	9	8			
44 Life span		1			1	
45 Differential mortality (by social or economic groups)	11	5	7		23	
46 Crises (epidemics, famine, war)	29	21	16		66	
47 Distribution of deaths by causes	10	12	13		35	
48 Hygiene, public health and related services, effects on mortality, morbidity	11	12	10		33	
49 Traditional medicine	4	2	4		10	
5. FERTILITY	38	16.7	40	19.1	37	15
51 General, seasonality	11	3	9		23	
52 Natural fertility and sterility	1	5	2		8	
53 Differential fertility by economic or social groups	5	3	3		11	
54 Birth control	3	5	5		13	
55 Relationship between fertility and other demographic variables	7	7	4		18	
56 Relationship between fertility and socio-economic variables	6	7	8		21	
57 Illegitimacy (fertility out of marital bond), abandonment	5	10	6		21	
6. NUPTIALITY, FAMILIES, HOUSEHOLDS	52	22.9	55	26.3	45	18.2
61 General: Ideas about marriage, cohabitation, consensual unions	7	23	18		48	
62 Nuptiality and miscegenation, definitive celibacy	3	3	3		9	
63 Age at marriage	9	7	1		17	
64 Duration of marriage; widowhood (male of female); divorce	4	2	1		7	
65 Remarriages	1				1	
66 Size and composition of households or of hearths	18	14	11		43	
67 Family cycles	8	1	3		12	
68 Marriage market; kinship and affinal relationship (endogamy, homogamy, cross-breeding)	2	5	8		15	
7. STRUCTURES OF POPULATIONS OR SUBPOPULATIONS	75	33	73	34.9	97	39.3
71 General	7	7	3		17	
72 Distribution by age (ageing), by gender or by marital status	12	10	18		40	

73 Ethnic, racial and linguistic characteristics	4	2	7	13	
74 Genetic and biological characteristics; isolates	1	4	2	7	
75 Socio-economic characteristics (e.g. distribution by occupation)	41	35	46	122	
76 Cultural characteristics (illiteracy); religious characteristics; castes	7	10	8	25	
77 Integration, segregation	3	5	13	21	
8. INTERRELATIONS BETWEEN ECONOMIC AND DEMOGRAPHIC VARIABLES	44	19.4	45	21.5	41
81 General	14	9	7	30	
82 Demographic variables and natural resources (food)	12	9	10	31	
83 Industrial growth and demographic variables	18	25	21	64	
84 Development of services sector and demographic variables	2	3	3	5	
9. INTERRELATIONS BETWEEN DEMOGRAPHIC VARIABLES AND OTHER SOCIAL VARIABLES	42	18.5	37	17.7	39
91 General	13	5	5	23	
92 Public health, public assistance, hygiene and demographic variables other than mortality	6	7	8	21	
93 Social factors (religion, economic and social status, pauperism, education) and demographic variables	22	25	20	67	
94 Habitat, housing, ecological factors (climate, geographical context)	1	48	23	76	
10. METHODOLOGY OF HISTORICAL DEMOGRAPHY	75	33	48	23	76
101 General	9	4	10	10	
102 Data checks: inventories and gaps in parish registers and vital registration	15	11	16	42	
103 Censuses and lists of taxpayers, militia, voters	37	21	30	88	
104 Data processing	6	3	4	13	
105 Data processing by computer	6	6	13	25	
106 Principles and methods of demographic analysis	1	2	2	5	
107 Paleodemography; interpretation of archeological excavations	1	1	1	3	
Entries	583	227	561	209	650
Number of articles and books					247
					1794
					683

For the Walloon part, there are very few studies. The only notable exception - with a strong demographic approach - concerns an analysis of the moves of Walloons from Brabant to the United States in the mid-nineteenth century (Eggerickx and Poulain, 1987 [280]). These people, mainly smallholders and farm labourers, were fairly representative of the population of their departure area. However, demographic behaviour in their new residence was quite distinctive. It seems as if singles sought to marry, newly-weds had to leave and they also showed an excessive fertility. Again, the complexity of the migratory phenomenon is demonstrated.

2. THE DEMOGRAPHIC TRANSITION

Since the existence of historical demography as an academic discipline, the major focus of research has been on the study of the demographic transition which can be defined as the process from high to low levels of both fertility and mortality.⁸ Today it is most probably one of the best documented phenomena in social sciences. Belgian researches have given proper weight to it, mostly by focusing on one particular theme. The phenomenon is dealt with under the heading of fertility, family history or mortality. During recent years more attention has been paid to interrelations, especially with migration (Oris, 1996 [213] and 2000 [185]; Alter et al., 1999 [335]).

2.1. Fertility control

The number of Belgian studies devoted to fertility is relatively limited; only 15 to 20 per cent of all publications on historical demography between 1980 and 1995 refer to this subject (table 1). A lot of them are dealt with under the heading of the demographic transition. Indeed, as scholars came to realise that mortality was largely an exogenous variable in the demographic system, the transition theory was reduced to a theory of fertility transition (Saito, 1996). The proportion is smaller than the international trend observed by Perrenoud for the period 1979-1984 (22 per cent). And it is certainly less than the studies on population structures and on spatial distribution, two research branches that have aroused increasing interest among Belgian researchers, as we already mentioned in section 1. Between 1990 and 1995 respectively 39.3 and 57.5 per cent of all publications directly or indirectly discussed these topics (table 1).

⁸. For a historiography of the demographic transition, see Friedlander et al. (1999).

Nevertheless, the numbers on fertility do not account for the important development of research objectives and methodology within this theme, neither for the strong interest of international scholars.

Family reconstitution, the method *par excellence* of historical demography, has been developed by Louis Henry (1958) especially for the study of fertility. Even though it allows the scholar to work with a series of refined measures, the parish registers on which it is based limit its applicability. In Belgium, Chris Vandenbroeke (1976) paved the way for innovation by adapting the reconstitution technique to a new source: the population registers. Hence, three of its main shortcomings could be addressed. First, since most population registers start in 1846 (some in 1830, in Ghent even in 1796), research on the nineteenth century could finally take off. Second, it became possible to collect data more rapidly and the progress in information technology helped to create and manage larger databases. Urban and industrial populations stopped being inaccessible and differential analyses could rely on sufficient population numbers. And last, but certainly not least, population registers permitted to study the reproductive behaviour of mobile populations. Consequently, the new source materials encouraged a change in research objectives. Two new interests emerged: the demographic transition and differential fertility.

During the 1970s the Princeton European Fertility Project on Belgium had revealed two important results: the industrialized and urbanized areas were those where fertility declined earlier and faster and in that sense, Wallonia displayed family limitation first. Ron Lesthaeghe explained these findings by socio-economic factors – “*modernization of the occupational structures was a forceful agent in the process of fertility reduction*” – and by cultural factors, language and secularization in particular (Lesthaeghe, 1977, 224). The Princeton project’s framework, for which some new comparative indicators - mostly based on Hutterite fertility - were developed, made it possible to distinguish two different demographic systems within Belgium. In Flanders there was a ‘wasteful system of human life’ where high fertility went hand in hand with high infant mortality, and this because of a shorter breast-feeding period. Wallonia tended towards a ‘conservation system of human life’ where fertility and mortality levels were lower. Walloon and Flemish populations were, however, far from homogeneous. Even within the Walloon region two types of fertility transitions could be identified (Oris, 1995 [212]): an early (from the 1850s) and gradual decline in the industrial towns of Hainaut and a later (around 1900) but very abrupt one in the urban area around Liège. René Leboutte (1987 [203]) and Michel Poulain (1996 [215]) relate these differences to a broader process of societal transition: the shift from a mass-poverty society to a relative mass-abundance society.

The Princeton project relied on aggregate statistics, at national level, or at best, at regional or district level. However, it was problematic to use these for explanatory purposes: it was not possible, for instance, to easily identify innovating groups. At this point the originality of the nominative analyses based on population registers appears. If, from a quantitative perspective the bibliography on Belgian fertility is not very long, it weighs, on the contrary, heavily on the international scale. While research in other countries has remained conditioned by the Princeton project and its aggregate methods (Coale and Watkins, 1986), Belgian historical demographers have succeeded in studying the transition of reproductive behaviour, and especially social differences, by nominative data. They have analysed differences in fertility behaviour by two criteria in particular: the socio-professional status and, more recently, the status of the immigrant. Indeed, for the first time mobile families have not systematically been excluded from analyses.

From a socio-economic perspective, even socio-cultural, it is generally accepted that the rich and the wealthy, in short, the elite, initiated the transition. Watkins and McCarthy (1980) showed that in the village of La Hulpe the clearest signs of birth control were among the literate and the bourgeoisie. For the textile city of Verviers George Alter (1988 [222]) found that the fertility transition started with the elite, but that it was pervasive in the rest of the occupational hierarchy. While there was considerable social distance between the upper middle-class and the rest of the community, there was much less social distance among the other groups. This social cohesion was particularly apparent in the case of Seraing where Michel Oris noticed a very abrupt collapse of legitimate fertility, or in his words "*une révolution au lit*", whatever the age of the mother or the number of surviving children (Oris, 1993 [211]). The transition was, however, more complex. Earlier the same author had examined the spread of birth control among the lower classes of the small city of Huy (Oris, 1988 [210]). 'Stopping' appeared as an innovation, but the process among the poor families was not uniform. Especially couples which had prenuptial relations were less innovating. Oris (forthcoming [072]) relates this contrasting behaviour within the Walloon proletariat to the adaptive character of the spread of new values: "*Pratiquement toutes les études indiquent une diffusion de la régulation des naissances du haut vers le bas de la pyramide sociale. Les historiens ne croient plus, cependant, à un processus d'imitation, de capillarité sociale, plutôt à une acculturation, une imprégnation progressive de valeurs bourgeoises et d'un modèle familial bourgeois fort, valeurs et modèle adaptés par chaque strate sociale à sa situation et à ses aspirations*". In this respect, the differences in fertility limitation between gunsmiths and coal-miners revealed by Leboutte (1988 [145]) for the Basse-Meuse are quite striking. They were less a case of strictly economic conditions (income differences) than of social status. And very recently, Jan Van Bavel (2001 [216]) has demonstrated in his dissertation on the Flemish city of Leuven

the relation between on the one hand stopping behaviour and on the other hand social status and residence.

The complexity of the fertility decline can also be demonstrated by research on native and migrant behaviour. Indeed, when Alter (1988, 193 [222]) noted that "*women who had entered Verviers after age 15 were much less likely to show signs of family limitation*", the exact inverse process was observed in the industrial city of Tilleur where the immigrants were the pioneers of change (Oris, 1996 [213]). And in this special issue, the contribution of Thierry Eggerickx on the basin of Charleroi underlines the similarities in the birth control of natives and migrants. In this way the basin also resembles the Land of Herve, a rural area in eastern Belgium (Neven, 2000 [236]). So, by all accounts, there was more than one mechanism at work. Knowledge of the social, economic as well as the cultural context is thus extremely important for understanding the response to and the adoption of new behaviour. The migrant profile is undeniably very diverse.

These new research directions were also accompanied by methodological innovation. Indeed, if the use of the population registers had permitted to cross the boundaries of family reconstitution, there was still the problem of mobile families to overcome.⁹ Belgian researchers have suggested some solutions. Leboutte (1988 [145]), for instance, took all the 'completed' families into account, more precisely those for which he knew the date of the end of observation, even if it concerned emigration. And in a recent analysis Eggerickx (1998 [199]) also integrated immigrants who became sedentary. Yet in spite of these initiatives the representativity of the sample cannot be guaranteed.

In the same perspective, some years before, Watkins and McCarthy (1980) had approached the topic from a very specific unit of observation, i.e. the woman. In 1988 George Alter [222] took this one step further by studying fertility within the context of the female life course (see also section 2.2). His *Family and the female life course* represented a technological breakthrough; it is distinctive for its use of event history analysis. During the last decade this statistical technique has been increasingly used by Belgian historical demographers (Neven, Oris and Van Bavel). The advantage of the approach is double. First, it permits a higher representativity since mobile populations are studied in the same way as stable populations: "*The linking of successive events to individuals makes it possible to determine, for example, the extent to which the brides in a village*

⁹. According to the criteria of Henry, only families for which there is information about their entire reproductive period can be research objects (*familles MF*).

were pregnant before marriage; information on migration permits the exact determination of the population at risk of each month's demographic events" (Watkins and McCarthy, 1980, 168). Information about exposure time is indispensable and has to be precise. For instance, duration before birth can be studied by integrating the first observed birth, either since marriage or since the previous birth. So, when the mother is an immigrant we cannot integrate the first observed birth since we do not have any information about her fertile past, but at least we can include every following birth. With the reconstitution method this woman would have been excluded from analysis. In the case of the Land of Herve – an agricultural area that had an annual migration turnover of about 10 per cent! – this approach permitted to improve considerably the representativity of the sample, passing from 11.5 per cent with family reconstitution (because very few married women continued to live in the same village during their entire fertile life) to 78.4 per cent of the theoretical observable population (Neven, 2000, 509-513 [236]). It is true that with this method it is impossible to measure all the indicators of family reconstitution, nevertheless, it makes a better differential analysis possible, for instance, of migrants and of natives. And herein lies the second important advantage: it transforms causal analysis. Research is no longer confined to social factors based on professional status or origin, but a whole series of familial variables can be integrated which can considerably enhance our understanding of the deeper motivations that brought women to modify their fertility patterns. In other words, it allows to identify better the proximate determinants of fertility. For instance, Jan Van Bavel (in this issue) discusses the relations between pregnancy risks and social class, isolation from family and migration. By using event history analysis which allows him to control each of these variables separately, he tests the 'net effect' of each factor on the risk of a prenuptial pregnancy. If single people of lower status and immigrants, compared to other single people, demonstrate a higher risk of getting pregnant before marriage, it appears from his analysis, however, that isolation from family is not a determinant factor.

2.2. From marriage to family

Since the mid-1980s the interest in the topic of nuptiality has declined (table 1). Before that time about one fourth of Belgian publications referred to marriages and households, a similar proportion to international publications in the IBHD (Perrenoud, 1986), and they were mostly the result of a boom in research on protoindustry in which the demographic consequences play a significant role.

The importance of the studies on our country lies precisely in the re-examination of the protoindustrialization hypothesis as established by Franklin

Mendels (1984 [183]) and others. According to this hypothesis, protoindustrialization provided economic opportunities for self-sufficiency reducing the need to postpone marriage until parental farm land was made available. Belgian studies, however, offer no proof of this evolution. Chris Vandenbroeke showed that the proto-industrial phase in Flanders had no positive influence on nuptiality patterns (1984 [188]). The overall picture appears to be one in which marriage ages were rising, not falling. During the first half of the nineteenth century there was an overall tendency towards a more restrictive nuptiality pattern which illustrates the depression of the rural industry during the 1840s (Devos, 1999 [170]). The research of Myron Gutmann on some Walloon localities confirms these findings. His results for the area around Verviers show no significant relationship between industrial development and nuptiality. Marriage ages were high in all localities, and the trend of marriages was similar in both urban and rural settings (Gutmann, 1987 [171]). According to Gutmann and Leboutte, marriage ages stayed high because "*a peasant mentality continued to operate, even after industrialization*" (1984, 604 [172]).

Indeed, in Wallonia where research on the countryside is quite recent, the demographic system remained tense until the beginning of the twentieth century. The malthusian check did not relax, neither in the pauperised Ardennes (Alter and Oris, 1999 [166]), nor in the Land of Herve (Neven, 2000 [236]) where the rural economy (cattle rearing) survived the collapse of the proto-industry. In both areas, a positive natural growth (high legitimate fertility and low mortality) maintained pressure. The stability of these rural populations was ensured through a strong check on marriage and the out-migration of surplus population (see also Eggerickx, 1998 [199] for the rural areas of central Wallonia). Analyses on the demographic regime of the northern countryside are more numerous. Vandenbroeke (1984 [074]) has studied in full detail the malthusian framework for the Flemish countryside where relations between the small-scale intensive agriculture and the cottage industry (linen) were very tight. The area had to cope with strong population pressures (around 200 inhabitants per square kilometre) which resulted in extreme parcelling of the land. The strong competition between domestic linen and foreign cotton, together with the potato blight of 1846 and the harvest failures of the 1840s, resulted in a major catastrophe around the middle of the century. In other agrarian regions such as the Antwerp Campine, the crisis was less drastic because of the tight marriage market (Vanhaute, 1997 [242]). This stability, a combination of the traditional pattern of nuptiality and fertility with low emigration losses was based on a resilient, dynamic socio-economic organisation, at least up to the end of the nineteenth century.

As for the urban areas, research on Walloon cities has challenged the traditional idea that immigrant nuptiality was delayed and less intense than

that of natives because newcomers needed the time to integrate. In Huy and Tilleur, for instance, migrants put aside the malthusian brake of delayed nuptiality while the natives, living in the same environment, extended their control on marriage (Oris, 1988 [210] and 2000 [185]). The results correspond to those of Jacquemin (1996 [177]) on the city of Liège where immigrant nuptiality was also very intense. As for the age at marriage, it was usually higher for immigrants.

But the picture is not that simple. The higher intensity and age can also be a result of the structure of the matrimonial market. In the textile city of Verviers Claude Desama (1985 [153]) noted that the intensity and timing of marriage was negatively affected by migration flows dominated by young women. In the so-called 'black' towns, on the contrary, there were few opportunities for women to work, but more to marry. Native women were highly eligible, also because the economic context made their contribution to the family income relatively weak so they had much less pressure from their family to remain single than men. For the latter, marriage was a way to escape parental authority. A big majority of couples left the city quickly after marriage. In fact, immigration to an industrial city created opportunities for marriage (Oris, 2000 [185]).

The matrimonial market appears not only to have been defined by age and sex structures, but also by endogamy; several separate markets existed, for natives and for migrants. In the industrial city of Tilleur the natives were strongly attracted to each other, and foreigners, especially Flemings, were rejected. Migrants tended to marry migrants and natives primarily married natives. This linguistic criterion was particularly obvious in nineteenth century Brussels where marriage was a clear "*instrument de francisation*" (De Metse-naere, 1996, 89 [169]). The choice of a partner was undeniably a significant indicator of integration or segregation. In this perspective of partner selection, Flemish studies have relativised the theories of Edward Shorter (1975) on the importance of romantic love. According to this author, the rise of romanticism during the nineteenth century lead to more marriages between age peers. In the cities of Leuven and Aalst there was indeed an increase in such marriages, but the relation with romanticism appears to be limited: there were important differences between social groups (Van de Putte and Matthijs, in this issue). The data also suggest that women performed a pioneering role in marriage behaviour. Theirs was the first to decline (Matthijs, 2001, 181 [071]). Indeed, women's behaviour seems to be different from men's. In that sense, Alter and Oris (1999 [166]) discovered in the rural village of Sart a similar interesting nuptiality contrast – at the individual level – in the better capacity of women to cope with economic stress.

Research on marriage patterns is closely related to the study of household structures. Since Hajnals pioneering research, marriage in our country as in the rest of western Europe, is classically associated with household formation. The avalanche of studies in this field during the 1980s was nevertheless unexpected. In this respect, the thematic repartition of the IBHD is very significant: only a small place is attributed to the history of the family and its limits are strictly defined (table 1). Nuptiality has a central place, but family history receives only two sub-categories, i.e. household size/composition and family cycles. Between 1980 and 1995 respectively 43 and 12 Belgian studies were devoted to these categories.

Research has revealed that economic modernization was not really followed by clear changes in the family system. Changes in family behaviour do not conform perfectly to the traditional periodization of western history. The work of the Cambridge Group for the History of Population and Social Structure, and Peter Laslett (1971 and 1972) in particular, has firmly established the predominance of the nuclear household model – as opposed to the stem family with a powerful head of household and a strong lineage – and its persistence during the last three centuries.

The early work on history of the family in Belgium, and in other countries, was based on a narrow view of the family as a household unit at one point in time, and was the result of historians excessive reliance on census data (Van Loocke, 1981 [244]). Indeed, the method of family reconstitution was developed for and directed towards the writing of a population history rather than a history of the family. In fact, the two disciplines did not interact. The Cambridge Group illustrates this lack in dialogue: historical demographers, such as Wrigley and Schofield, worked during decades in harmony with family historians such as Laslett and Wall, but never had joint publications. This can partly be explained by the difficulty in finding a common language, in particular in defining what the term 'family' actually represents: a reproductive unit for the one, a household for the other. Yet, it was obvious that the definition could not remain restrictive and the term could also define a larger network of kin relatives (Delille, 1985; Levi, 1987).

During the 1980s Belgian research became more concentrated on examining the changes in the structure of the family during their entire cycle (Danhieux, 1983 [230]; Wall, 1983 [246] and 1986 [248]). Indeed, late marriage, high mortality and fertility rendered a variety of family patterns. Individuals living in a nuclear household at one point in time were likely to live in an extended household at another. The average duration of a nineteenth century marriage was between 15 and 20 years. 20 per cent of marriages ended after 5 years, 40 per cent after 10 years. Two out of three children lost at least one parent before

their twentieth anniversary. Clearly, most households experienced the nuclear family phase only during a part of their life cycle (Vanhautte, forthcoming [076]). From this, researchers came to realise the importance of viewing the family as a more dynamic process. Recently, there is a tendency to analyse family structures in relation to labour and Chayanov's cycles and interpret these in regard of family adaptive strategies (Leboutte, 1998 [232]; Vanhaute, 1999 [243]). But already before, some Belgian historians, by approaching the family as an active agent, had explored the way in which families took charge of their lives, their choices regarding family formation and household economy, and their interaction with social, economic and also cultural forces. Their attention was concentrated on income and expenditure patterns and the labour force participation of women and children (Alter, 1984 [221]; Lis, 1984 [234]; Van den Eeckhout, 1993 [241]). The link with demographic behaviour, however, was limited.

In the last decade analysis of the family cycle has been amplified by focusing on longitudinal, instead of cross-sectional data. In this perspective, the individual transitions of cohorts with changes in the family as a unit have become clearer, and individual and family time are linked. This fascination for internal household strategies has led to studies that go beyond mere structure analysis, and progressed towards the analysis of survival strategies of the so-called weaker groups, such as the elderly (Leboutte, 1990 [231]; Alter, 1996 [224] and 1999 [225]) and widow(er)s (Neven, 1998 [235]). In this respect, women have also received special attention (Alter, 1988 [222] and 1991 [223]; Scholliers, 1991 [239]); Oris, 2000 [238]).

Focus on the internal logic of households has made research move from a simple structural approach in which people were assumed to behave the same in similar economic conditions to a more complex approach which draws attention to the actions and motives of individual members of households. In other words, there seems to be a shift from the macro to the micro level, and lately to a possible connection between the two. In a recent exercise on two rural regions and one urban area in Flanders, Vanhaute has tried, by a top-down approach, to link transformation in the labour markets to strategies of household organisation (1997 [242]). But also, a bottom-up approach, based on the life course paradigm (presented in this issue by Devrieze and Vanhaute), is increasingly used. The emphasis is on transitions during the course of life, such as leaving home, marriage, household formation, and living arrangements, especially for the elderly. From a technical point of view, this approach is quite different from the previous one, since the individual, rather than the household, is the basic unit of analysis. However, it does not imply an anachronistic perception of past behaviour in terms of contemporary individualism, but rather another way of looking at family dynamics as a complex web of

relationships between family members, and as a complex set of individual aspirations, family prospects, and collective constraints. For example, the evidence presented by Alter (1996 [224]) for nineteenth century Verviers suggests that children tended to share responsibilities for elderly parents. The European marriage pattern, identified by John Hajnal (1965), offered a solution for those elderly who had children because co-residence (in particular for widows) with (mostly unmarried) children was the main source of support. Those who never married had to rely upon the community, or liquidate their property and become boarders in households of non-kin.

Another approach to articulate individual and collective levels is the exploration of family networks as a filter between the individual and his or her community. In the past, members of nuclear families were engaged in close ties with kin. Belgian historians have been reluctant to study kinship networks, but in the last decade these have received more serious attention (table 1). New methods, indeed, have been developed to approach relatives living in the same locality but not necessarily sharing the same household: first, the observation of close kin – i.e. parents, siblings and children – during their entire life course, and second, a patronymic approach allowing to mark everyone sharing the same surname (Capron, 1998 [045]; Neven, 2000, 238-263 [236]). The first results emerging from eastern Belgium reveal a contrast between industrial towns and countryside, with much smaller networks in the former. But even within the rural world, differences appear between Sart, an Ardennes village where people were well-rooted and could rely upon networks consisting sometimes of more than one hundred people, and the Land of Herve, a tenant society where the high migration rates usually prevented large family networks. In Sart, 23 to 25 people on average shared the same family name. The patronymic networks in Herve averaged about 10 to 12 people, and in the coal and iron city of Tilleur, only 7. These results prove that, at least here, chain migration within families was not common behaviour: if this was the case, the large networks observed in some rural areas would have shifted from the countryside to the cities.

Yet, in spite of the different sizes, family networks appeared effective in all places. In Herve, for example, kinship in the broad sense of the term allowed young single people to marry more easily and encouraged stability. The more the individual could rely on a larger potential family network, the higher his or her chances to stay in the village. This result applied to all: single or married people and the elderly (Neven, forthcoming, [237]). Besides, these networks proved even more efficient for the weaker, such as widows and orphans (Alter et al., forthcoming [226]).

So, the approaches differ, but even a rapid and incomplete summary as the above, reveals that at least the scientific aims are similar. Family history is

becoming a central chapter of population history, and moreover, probably the most important key to go beyond statistics and reach the cultural determinants of demographic behaviour and the deep-rooted anthropological realities.

2.3. The decline of mortality

With more than one hundred entries, mortality has been the main concern of Belgian historical demography during the first half of the 1980s (table 1). The theme had also significant weight in other countries, but it was not as dominant (Perrenoud, 1986). After 1985 mortality lost its numerical supremacy, due to a lesser interest in studies on crises and infant mortality but, while losing ground, it was still discussed in nearly a third of all publications. Paradoxically, Belgian studies in this field have only very recently received international attention. In this respect, its virtual absence, except for a few references on infant mortality, in Schofield and Reher's *The decline of mortality in Europe* (1991) is very significant. Indeed, Godelieve Masuy-Stroobants regional analysis of infant mortality (1983 [376]) is well known, but, for instance, Dion Veys work has mostly passed unnoticed. However, he does provide important data for comparative analysis i.e. period life tables for our country from 1892 to 1977 and cohort life tables from 1830 to 1945, by age and by sex (Veys, 1983 [417]).

During the 1980s an important body of work was produced on infant mortality, at national level and from an aggregate perspective. Nineteenth century Belgium was characterized by an exceptionally high infant mortality in Flanders. At district level, the differences are even more noticeable. Although nutritional in origin, they also reflect unfavourable economic and social conditions (Masuy-Stroobant, 1983 [374]). Flemish infant mortality increased during the late nineteenth century and was related to malnutrition; because of the higher industrial employment of women, mothers could no longer breast-feed their babies and were forced to resort to artificial feeding (Vandenbroeke et al., 1983 [403]). The breast-feeding hypothesis gave rise to an important discussion during the 1980s about the explanation of regional differences in infant mortality in Belgium (and the Netherlands) between on the one hand Chris Vandenbroeke and colleagues (1983 [402, 403, 404]) who suggested differences in the duration of lactation were responsible and on the other hand Hofstee (1983 [366]) who turned to factors such the quality of water and malaria. The debate provided the material for a special supplement of *Bevolking en Gezin* (1983). Ron Lesthaeghe (1983 [372]) assessed their evidence and concluded that it was not a choice between alternative hypotheses, but rather a combination of both that yielded the best explanation. Nowadays, the discussion continues to arouse interest. In a very recent article on the Flemish countryside, the importance of malaria as an explanation for differential

mortality was re-examined and confirmed (Devos, 2001 [351]). And in this special issue Marc Debuission offers a qualitative analysis of regional differences in feeding habits: breast-feeding appears not a determinant factor.

Despite years of macro level research, much remains to be learned about the actual determinants of the mortality transition in Belgium. Our understanding of major trends in mortality is largely based on the classic work of Thomas McKeown (1976). Despite its many shortcomings, his main conclusion that medical science contributed little to the decline of mortality, at least not until well into the twentieth century, is still valid. International controversy continues about the relative role of socio-economic measures (especially nutrition), public health (water supply and sanitation systems) and personal health behaviour for the improvement of mortality. In Belgium, some attention has been paid to the importance of nutrition and the standard of living as a causal factor (André and Pereira-Roque, 1974; Bruneel et al., 1987 [063]; Daelemans and Scholliers, 1988 [344]). The evolution of personal hygiene (Velle, 1984 [406]), of child care facilities (De Vroede, 1981 [352]) and of medical infrastructure (Havelange, 1990 [364]; Velle, 1991 [412]; Gadeyne, 2000 [363]) have been extensively studied. And recently, the history of public health in Flanders was surveyed in a special volume (De Maeyer et al., 1998 [347]). Nevertheless, these studies only sporadically relate their evidence to specific measures of mortality and rarely draw upon international theories. An important study on the causes of the decline of mortality, for instance, similar to the fertility project undertaken by Lesthaeghe (1977), is still missing.

During the last decade, aggregate data have been questioned, especially for explanatory purposes. Indeed, district-level values conceal local variations. For instance, during the first half of the nineteenth century, even within the Flemish countryside, there were a multiplicity of mortality histories. Disease environments varied from place to place and communities as little as 10 kilometres apart presented very different mortality levels and patterns that seem to be the result of ecological conditions (Devos, 2001 [351]).

As for the urban areas, the study of Eggerickx and Debuission (1990 [357]) on southern Belgium has indicated a clear relationship between the size of the town and the level of mortality. Population growth placed huge demands on urban infrastructure. Around the middle of the nineteenth century, during the so-called 'paroxystic' growth, life expectancy in industrial centers even declined (Alter et al., 1999 [335]). Inferior housing, poor provision of water and lack of sanitation created the perfect environment for high infant and child mortality. For instance, infant mortality in the industrial city of Seraing was higher than 200 per thousand during an important part of the nineteenth century and child mortality was almost double than in the nearby rural village

of Sart (Alter and Oris, 2000 [337]). Jeroen Backs (in this issue) presents even higher figures for the textile city of Ghent where there was also a widespread use of child labour. In this respect, industrialization was very unfavourable, probably even more than population growth itself. However, for active adults, a relatively low mortality was noted by Michel Oris and George Alter (in this issue) in the industrial cities of eastern Belgium. This pattern, a lower than average adult mortality, which they did not observe in traditional centers, was a particular feature of nineteenth century industrial centers and is related to the impact of migration (see further).

These cities were also more frequently hit by epidemics than other urban centers, and rural areas were more or less spared (Neven, 1997 [379]). By the eve of the First World War this urban-rural contrast had virtually disappeared: increased mobility between the city of Verviers and its surroundings resulted in a 'common epidemiological basin'. Both were participating in the so-called 'epidemiological transition', identified by Abdel Omran (1971), which consist of a change in the leading causes of death from infectious to degenerative diseases such as cancer and coronary diseases.

The international discussion on this transition process has been widened to include morbidity. The work of James Riley (1987) in particular has suggested that trends in mortality and morbidity are inversely related. The notion that mortality as well as morbidity should be included in the epidemiological transition has led towards its renaming into the 'health transition' (Caldwell, 1990). These developments appear to have inspired Belgian researchers only slightly. The history of disease, which is much broader than the history of causes of death, has remained largely uncharted territory; researchers are still looking for the appropriate sources (Van den Eeckhout and Scholliers, 1997 [010]).

Whilst it is true that in the past epidemics have been a major emphasis of mortality research, it has to be said that they were mostly the subject of case studies, centered around the great cholera epidemics of the nineteenth century. Examples range from cholera in Namur (Patout-Libion, 1982 [389]), Brussels (Falise, 1984 [362]), Antwerp (Van de Vijver, 1984 [399]), Ghent (Mahieu, 1984 [373]) to cholera in Malines (Keulemans and Vanderhaeghen, 1987 [368]). These articles all deal with the local impact of the disease and the initiatives taken by local government. During the last decade demographers have become involved and epidemics were placed in a different perspective: analysis of the statistics of causes of death i.e. age and sex differences, of the specific disease environment, and of the impact of the demographic transition, etc. (Oris, 1987 [383], 1994 [386] and 1995 [387]; Eggerickx and Poulain, 1988 [358] and 1991 [359]; Poncelet-Renard 1998 [391]). Nevertheless, and apart from the studies of Neven (1997 [380]) on eastern Belgium and Capron (1998 [341]) on the city

of Limbourg, the focus remains on one particular disease. This is most probably related to the difficulties in classifying causes of death from historical records since these mostly provide inadequate or ambiguous medical terminology. Researchers wanting to classify and categorise need to understand the historical system of death registration, the terms used to describe these and how they changed over time (Velle, 1985 [031] and 1986 [409]; Oris, 1990 [385]). It is, however, a valuable exercise since analysis of causes of death is particularly important for uncovering causal mechanisms.

Our knowledge about certain causes of death has been greatly improved since 1981. Nevertheless, a great deal remains to be done. Information about morbidity is still largely based on assumptions. The prevalence of sickness and the indirect causes of certain diseases are only starting to be explored (Devos, 2001 [351]). Scholars are also just beginning to appreciate the contribution of specific sources such as hospital records and statistics of health centres for historical epidemiology (Velle, 1984 [029], Horrent et al., 1994 [367]; Neven and Oris, 1995 [381]). The history of health can be further examined through doctors reports, sickness fund records, insurance funds, etc. And special mention should be made of medical topographies (Dorban, 1984 [354]; Velle, 1984 [407]; Devos, 2001 [351]). In this respect, research on the history of medicine falls outside the scope of historical demography as conventionally defined; it is most probably the area of historical demography which draws the most on qualitative data.

The turn towards micro level research in recent years, which we already discussed in the sections on fertility and nuptiality, is also very apparent in mortality analysis. Again, differential analysis is concentrated around two criteria: the status of the migrant and the socio-professional category. Indeed, the particular characteristics of mortality in an urban environment cannot be understood without taking migration into account (Bourdelaïs, 2000). A recent analysis on a few Walloon and French towns has – surprisingly – shown that immigrants had lower mortality than natives (Alter et al., 1999 [335]). The phenomenon seems to be to the result of a double selection process: at the departure from the village (migrants were in better health since families with higher mortality did not participate in migration) and on arrival in the city (the weaker ones were forced to leave again). However, for the children of these migrants, the situation was less favourable. Immigrant children had a much higher mortality. In this issue Oris and Alter offer evidence on children of Flemish migrants in the coal-mining town of Tilleur who experienced more than triple the mortality risk of natives.

Within these towns, there were also striking social differences. Between the rich and the poor, mortality could actually double (Eggerickx and Debuission,

1990 [357]). Similarly, Jeroen Backs (in this issue) discovered an increasing social contrast for the city of Ghent during the second half of the nineteenth century. And an analysis of the working-population of Tilleur has demonstrated that not all professional categories were affected equally (Neven, 2000 [380]). Miners were the prime victims and accounted for the low life expectancy of the entire community. Placed within the context of the household economy, the exercise revealed an increased pressure for these men between ages 35 and 50, that is ages when children were too young to contribute to the family income and men were forced to work more hours. This was also the case in the industrial city of Seraing, where an excess male mortality was very apparent after age 45 (Oris, 1998 [388]). It seems the moment at which labourers started paying the price for their past years of hard work.

By all accounts, age and sex differences seem to provide particularly successful angles from which to approach social and migrant mortality. During the 1980s the focus was on infant mortality, but as researchers, in Belgium and elsewhere, came to realise that infant mortality was not a good indicator of sanitary conditions (since babies profit from the antibodies of their mother during the breast-feeding period), attention shifted to childhood mortality. Together with female mortality these have formed the main research areas of the 1990s.

Ever since the discovery of excess mortality of young girls by Michel Poulain and Dominique Tabutin (1981 [392]), Belgian researches have shown a particular interest in the male-female differential (Vandenbroeke, 1991 [401]). During the nineteenth century, mortality of young girls in Belgium was about 15 tot 20 per cent higher than their male counterparts (Eggerickx and Tabutin, 1994 [361]). Nearly every European country was characterized by excess female mortality at childhood and adolescence, and it is generally assumed that agricultural change was a key component for the development of this phenomenon (Johansson, 1991). Research on Belgium, however, has demonstrated that excess female mortality was not an exclusively rural phenomenon but that it even persisted with industrialization and considerable urban development (Devos, 1996 [348]). The issue has important implications for the so-called 'standard of living debate', particularly for the question whether industrialization actually improved women's conditions. The Belgian case offers evidence for the pessimists in this debate (Horrell and Humphries, 1992): modernization did not automatically increase women's opportunities (Devos, 2000 [350]).

In the past research on living standards was mainly conducted through prices, wages and purchasing power, but since the 1980s the approach has been complemented with alternative indicators such mortality rates, life expectancies and anthropometric measures. In this perspective, John Komlos (1993) intro-

duced the concept of the 'biological standard of living'. In Belgium research on stature has received some interest (Vandenbroeke, 1981 [027]; Roosemont, 1987 [025]; Oris, 1998 [388]) but it has not been sufficiently integrated in the discussions. As research in other countries has shown, information on health can be an interesting approach of measuring the impact of industrialization and has even permitted to move old debates to new levels. At this point, it is also interesting to refer to another indicator of living standards as suggested by the EurAsia Project.¹⁰ Their approach to living standards consists in examining demographic response to short-term economic stress. By focusing on the distribution of resources within the household, they interpret sex and age differences in mortality as measures of short-term economic crisis. The results for the Land of Herve and the East Ardennes have revealed that households were indeed sensitive to economic stress, and that especially the mortality of married women was negatively affected (Alter et al., 2000 [228]).

CONCLUSIONS

Belgian historical demography has mostly aroused the interest of historians, and in that sense the field is somewhat different than in other countries where it seems to be occupied in a more diversified way. Not surprisingly, Belgian historical demographers have stayed within and reflect the tradition of Belgian historians; they are very preoccupied with empirical activities and in that respect, they like to remain close to their sources. They give particular attention to the collection and the quality of their data, to the use of an appropriate methodology, to the mastering of different techniques, and they have a strong sense of 'objectivity'. But the development of explicative models or theoretical frameworks does not seem to be at the top of their agenda. In recent years, however, they have increasingly engaged in theoretical debates and have developed new hypotheses. Especially the work of the EurAsia Project, in particular with regard to family adaptive strategies and decisions regarding family formation, has stimulated Belgian historical demography in this direction.

¹⁰. The *EurAsia Project for the Comparative Study of Population and the Family* was set up in 1994 and is a collaborative and interdisciplinary project including five national teams from China, Italy, Japan, Sweden and Belgium. Co-ordinators for Belgium are Michel Oris at the University of Liège and George Alter at Indiana University (USA). Employing longitudinal data they link family systems and household structures to the analysis of demographic behaviour (not only mortality, but also fertility, nuptiality and migration) which they compare in the context of 'Eurasia'. For a detailed presentation of some of the research results, see Neven and Capron (2000).

The selective bibliography in this special issue demonstrates the vast and increasing amount of publications on historical demography during the past two decades, and also shows the need for a synthesis of research materials and results. In this article we have described the most important developments of nineteenth century demographic behaviour, and have highlighted the particularities of our country in this field. Consequently, the painted picture is a very optimistic one.

During the past decades Belgian researchers have displayed great dynamism and have broken down many stereotypes. Their attempts have been original thanks to the particularity of their sources and they have searched for methodological innovation. Indeed, as renowned as the French village of Crulai is for its use of family reconstitution and Colyton in England for inverted projection, the Belgian village of La Hulpe (Van de Walle, 1976) most probably is for its use of population registers. In particular, these sources together with the appropriate methodologies have enabled Belgian researchers to distinguish between the so-called 'stayers' and 'movers'. From this, they have been able to challenge traditional ideas. The results lead to an apparent paradox: broad and universal demographic processes, on the one hand and a variety of demographic behaviour, on the other hand.

It appears that Belgian industrialisation was quite traditional in the sense that it did not affect the traditional urban network in a spectacular way. Belgium developed as a nation of mid-size towns. Hence, it is not surprising that at the centre of the second industrial revolution lie the old and established cities where demographic growth was quite modest. During the nineteenth century there was no massive rural exodus, and natural growth – not migration – was the catalyst of industrial and urban growth. So, the mainly local origin of the industrial population allows Belgian researchers to challenge the so-called differential demographic behaviour of natives and migrants, and in particular the isolated and underprivileged position of the latter. For instance, contrary to the general belief that migrants needed time to integrate, research on wallonian cities demonstrates that immigrant nuptiality was very intense. Apparently there were separate markets: for natives and for migrants. As for mortality, the picture is not unambiguous: mortality of adult migrants was lower than of natives, but it was the opposite for their children. Fertility is even more complex: in Tilleur migrants were the forerunners of birth control, in Verviers they were the most conservative and in the basin of Charleroi there was almost no difference between the two groups. Clearly, the nineteenth century migrant profile is very diverse and needs further re-examination. Social differentiation produced similar interesting results. Mortality research revealed declining life expectancies during the foundation phase of industrial cities. An increasing mortality gap between social classes was noted in the city of Ghent during its

maturation phase. Research of gender differences suggested the particular and difficult position of young girls in industrial and urban environments while others had only encountered this phenomenon in rural areas. As for marriage behaviour and fertility, the results indicate a far from uniform process, differing between social groups. With regard to the latter, Jan Van Bavel (2001 [216]) attributes the pattern to social evolutionary processes which include adaptation as well as innovation and diffusion, and argues to lose the sharp distinction between the two.

Nevertheless, every population group, in urban as well as in rural areas, was participating in the demographic transition. In other words, all these spatial units were only small elements in 'worldscale' phenomena such as the fertility transition (Leboutte, 1987 [203]; Oris, 1993 [211] and 1995 [212]), the epidemiological transition (Neven, 1997 [379]), or even the gradual disappearance of excess female mortality (Devos, 2000 [350]). At this point, analysis transcends the local level and needs to move to a larger scale. It illustrates how macro and micro research are equally necessary for understanding demographic behaviour. But in any case, the results suggest that the demographic transition was more complicated than previously assumed. The fertility and mortality transitions were far from homogeneous, and they were the consequence of various processes of different subgroups that started at a different level and evolved with a different intensity and at a different rhythm.

Admittedly, these conclusions all result from case analyses and cannot be generalised as such. The majority of the Belgian publications on historical demography are indeed case studies. Two volumes illustrate this dominant trend, and also underline the contrast between the two regions of the country: *Dix essais sur la démographie urbaine de la Wallonie au XIXe siècle* (Desama and Oris, 1998 [065]) and *Tien bijdragen tot de lokale en regionale demografie in Vlaanderen* (Cloet and Vandebroeke, 1989 [064]). Each composed of ten cases and each dealing with mortality, fertility, nuptiality and migration, they show the multi-dimensional character of Belgian historical demography. In both volumes, we find mechanical case studies – as has been severely written by Patricia Van den Eeckhout and Peter Scholliers (1997, 158 [010]) – which “*incarnate a conception of history writing based on safe routines and automatization*”. However, some of the authors in these volumes develop real hypotheses: Poncelet on cholera, Roets on infant mortality, Oris on mortality in industrial environments, etc.

The need and will to consider research objectives at the local level, rather than simply describing local environments, gives historical demography an added value and avoids the law of decreasing outputs, inherent to the multiplication of case studies. In this respect, researchers can assume their confinement

to case analysis, as Leboutte (1988, 20 [145]) writes: “*En tentant de mesurer comment les habitants ont vécu ces grands changements que sont l’industrialisation et la transition démographique, on s’est efforcé de ‘réussir l’indispensable jonction entre histoire des mentalités et évolution des comportements démographiques’. Cette entreprise paraît ambitieuse, compte tenu de l’indigence des sources et de l’étendue restreinte du territoire étudié. Elle devait néanmoins être tentée, d’abord parce que le problème de la généralisation à partir d’observations locales n’est nullement insurmontable, ensuite parce que ce n’est qu’à ce niveau d’observation que l’on décèle les motivations qui accompagnent les changements de comportement*”. But such an assertion seems to be self evident. Recent research, however, has offered two solutions that do not necessarily exclude one another. They result from some preliminary thoughts on the appropriate way of dealing with specific data.

The first solution is a so-called *top-down* approach: it starts from the collective and often multidimensional level, and then descends to the familial or even individual level. It was apparent in Eggerickx’s dissertation (1998 [199]) on the fertility transition in the industrial area of Charleroi, which was divided in two separate but complementary parts. First, in order to identify the main demographic features and to characterise population dynamics, he analysed about 200,000 aggregate data, and then, relied upon individual and family data to investigate the impact of the economic depression of 1873-1890. The second solution, a *bottom-up* approach, is situated in the opposite direction, and has been privileged by the teams involved in the EurAsia Project. The aim of this large project is to analyse the demographic responses of different civilisations, reflected in a variety of family systems, to different levels and types of economic stress. The research is based on individual level data and methods, but it also integrates family dynamics, and macro determinants such as price series, structural economic changes, famines, epidemics, etc. which took place at local as well as regional and supra-regional levels. The scale of the research remains, nonetheless, local: mainly villages, but also small cities, and these are not necessarily representative. Indeed, the aim is not to trace, from these micro analyses, an average truth, which suits everybody or which can be generalised to the rest of the country. In fact, the goal is to demonstrate and understand the variety in human behaviour, and to improve differential demography by describing the scope of experiences of people born and raised in a particular familial environment, adapting to specific local surroundings (for instance, the Ardennes, the Land of Herve or the coal and iron cities of the Liège basin) and to important historical changes such as the industrial revolution or the social and economic mutations in the nineteenth century countryside. The difficulty is not only to disentangle each level of determinants (individual, familial, ecotypes, structural changes and even historical accidents), but also to see how these interacted. The first results are promising, and suggest that there is substantial room for progress of our knowledge of

past populations (see Bengtsson and Campbell, 1998; Bengtsson and Saito, 2000). Nevertheless, case studies with well-focused research objectives can also considerably enhance our understanding of broader and more universal processes. This interpretation was apparent in Vanhaute's study on the Campine area (1992 [111]) in which he examined survival strategies through family and individual sources, then continued at village level and related his results to large macro-processes such as industrialization and capitalism.

By all accounts, the results of Belgian historical demography are important and are not to be belittled. The research material allows to see patterns and raises questions that were initially unapparent. From all this, it is clear that historical demography – with its own sources, methodologies, descriptive and analytical models, conceptual frameworks and explicative theories – does not primarily have to be 'at the service of'. In other words, it deserves more than a subordinate position. However, it strongly needs interdisciplinarity and in that sense historical demography, historical geography, medical, social and economic history, have to stimulate each other. Historical demography starts from an integrated perception of reality and is henceforth less segmented than other social sciences; it discusses interrelations between mortality and migration, mortality and fertility, fertility and nuptiality, etc. Furthermore, demographic behaviour is situated at the crossroads of social, economic and cultural processes. 'Culture', in this perspective, has acquired growing importance. In the past it was too often considered as residual: for instance, cultural factors were only put forward as an explanation for the different fertility transition in northern and southern Belgium, after controlling for the social and economic differences between these regions. Nowadays, descriptive boundaries such as language are crossed in order to detect deeper anthropological structures. A renewed family history is now becoming an essential chapter of historical demography, and 'culture' is an integral part of it. In that sense, family history allows to grasp the norms and the values of a particular society, such as filial devotion or solidarity between relatives.

The research trends of the past decades introduced in this article are very present in the rest of this special issue. Migrant behaviour is analysed in relation to fertility by Thierry Eggerickx for the basin of Charleroi and to mortality by Michel Oris and George Alter for eastern Belgium. Kathleen Dillen discusses international migration and the importance of family networks herein. Mortality inequality, in particular for children and infants, is studied by Jeroen Backs for the city of Ghent where he links these to child labour and feeding habits. Marc Debuission examines the latter at aggregate level on the basis of quantitative and qualitative material. Social differences are further developed by Bart Van de Putte and Koen Matthijs concerning the age of marriage in the city of Leuven. Paul Servais focuses on matrimonial and family matters with

regard to the position of the Church. The contributions of Jan Van Bavel with event history analysis, and of Anouk Devrieze and Eric Vanhaute with life course analysis present some of the methodological innovations in Belgian historical demography.

In other words, the field is full of promise. Currently, historical demography is intensively studied at four universities in our country: Ghent, Leuven, Liège and Louvain-la-Neuve, which are all represented in this issue. But also important international scholars such as George Alter and Richard Wall have contributed to Belgian historical demography. Hopefully, this special issue will encourage and stimulate interest from abroad even more.

REFERENCES¹¹

- ANDRE (R.) and PEREIRA-ROQUE (J.), *La démographie de la Belgique au XIXe siècle*, Bruxelles, 1974.
- BENGTSSON (T.) and CAMPBELL (C.), "Microanalysis of effects of short-term economic stress on mortality", in C. E. NUNEZ (ed.), *Debates and Controversies in Economic History. A-Proceedings of the Twelfth International Economic History Congress*, Madrid, 1998, pp. 115-130.
- BENGTSSON (T.) and SAITO (O.) (eds), *Population and economy. From hunger to modern economic growth*, Oxford, 2000.
- BOURDELAIS (P.), "Demographic changes in European industrializing towns: examples and elements for comparison", *The History of the Family*, 5, 2000, 4, pp. 363-372.
- BRIAN (E.), "Statistique administrative et internationalisme statistique pendant la seconde moitié du XIXe siècle", *Histoire et Mesure*, 1989, 3-4, pp. 201-224.
- CALDWELL (J.) (ed.), *What we know about the health transition: The cultural, social and behavioral determinants of health*, Canberra, 1990.
- COALE (A.J.) and WATKINS (C.), *The decline of fertility in Europe*, Princeton, 1986.
- DELILLE (G.), *Famille et propriété dans le Royaume de Naples (Xve-XIXe siècles)*, Rome-Paris, 1985.
- DHONDT (J.), "Notes sur les ouvriers industriels gantois à l'époque française", in *Machten en mensen*, Gent, 1976, pp. 273-297.
- DUPAQUIER (J.) and (M.), *Histoire de la démographie: la statistique de la population des origines à 1914*, Paris, 1985.
- DUPAQUIER (J.), *Pour la démographie historique*, Paris, 1984.
- FRIEDLANDER (D.), OKUN (B.) and SEGAL (S.), "The demographic transition then and now: processes, perspectives and analyses", *Journal of Family History*, 24, 1999, 4, pp. 493-533.
- GAUTIER (E.) and HENRY (L.), *La population de Crulai. Paroisse normande*, Paris, 1958.
- HAJNAL (J.), "European marriage patterns in perspective", in D. GLASS and D. EVERSLY (eds.), *Population in History*, London, 1965, pp. 101-143.
- HORRELL (S.) and HUMPHRIES (J.), "Old questions, new data, and alternative perspectives: families' living standards in the industrial revolution", *Journal of Economic History*, 52, 1992, pp. 849-880.

¹¹. References not included in the selective bibliography of Devos.

- JOHANSSON (S.R.), "Welfare, mortality and gender. Continuity and change in the explanation of male/female mortality over 3 centuries", *Continuity and Change*, 6, 1991, pp. 135-177.
- KOMLOS (J.), "The secular trend in the biological standard of living in the United Kingdom, 1730-1860", *Economic History Review*, 46, 1993, pp. 115-144.
- LASLETT (P.), *The world we have lost*, London, 1971.
- LASLETT (P.), "Introduction", in P. LASLETT and R. WALL (eds.), *Household and family in past time*, Cambridge, 1972, pp. 1-90.
- LEBOUTTE (R.) and JOPPKE (C.), "Internal migrations. Geography, politics and culture in Europe and beyond", in R. LEBOUTTE (ed.), *Migrations et migrants dans une perspective historique: permanences et innovations*, Bruxelles, 2000, pp. 11-14.
- LEBRUN (P.), BRUWIER (M.) and DHONDT (J.), *Essai sur la révolution industrielle en Belgique, 1770-1847*, Bruxelles, 1979.
- LESTHAEGHE (R.), *The decline of Belgian fertility*, Princeton, 1977.
- LEVI (G.), *Inheriting power*, Chicago, 1987.
- MC KEOWN (T.), *The modern rise of population*, New York, 1976.
- MOCH (L.), *Moving Europeans. Migrations in Western Europe since 1650*, Bloomington/Indianapolis, 1992.
- NEVEN (M.) and CAPRON (C.) (eds.), *Family structures, demography and population. A comparison of societies in Asia and Europe*, Liège, 2000.
- OMRAN (A.), "The epidemiological transition: a theory of the epidemiology of population change", *Milbank Memorial Fund Quarterly*, 49, 1971, pp. 509-538.
- PERRENOUD (A.), "Où va la démographie historique? Analyse de contenu de la bibliographie internationale de la démographie historique", *Annales de Démographie Historique*, 1986, pp. 251-272.
- RILEY (J.), "Disease without death: new sources for a history of sickness", *Journal of Interdisciplinary History*, 17, 1987, pp. 537-563.
- SAITO (O.), "Historical demography: achievements and prospects", *Population Studies*, 50, 1996, pp. 537-553.
- SCHEPENS (L.), *Van vlaskutser tot franschman. Bijdrage tot de geschiedenis van de Westvlaamse plattelandsbevolking in de negentiende eeuw*, Brugge, 1973.
- SCHOFIELD (R.), REHER (D.) and BIDEAU (A.) (eds.), *The decline of mortality in Europe*, Oxford, 1991.
- SHORTER (E.), *The making of the modern family*, New York, 1975.
- VANDENBROEKE (C.), "Karakteristieken van het huwelijks- en voortplantingspatroon in Vlaanderen en Brabant, 17^{de}-19^{de} eeuw", *Tijdschrift voor Sociale Geschiedenis*, 2, 1976, 2, pp. 107-145.
- VAN DE WALLE (E.), "Households dynamics in a Belgian village", *Journal of Family History*, 1, 1976, 1, pp. 80-94.
- WATKINS (S.) and MCCARTHY (J.), "The female life cycle in a Belgian commune: La Hulpe, 1847-1866", *Journal of Family History*, 5, 1980, 2, pp. 167-179.