

Historical Demography

Understanding Temporal Change, Individual Variation and Regional Persistence

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Abstract

This chapter links recent Dutch and Belgian research in historical demography to on-going debates and emerging trends in the field at large. It starts with the perennial – but always fascinating – discussion on how to make sense of the demographic transition, an extremely complex subject. The discussion is currently moving to the wild fluctuations in fertility in the twentieth century, as well as to other changes known as the ‘Second Demographic Transition’. Following this, I discuss how historical demographers are making sense of the huge individual variations they uncover in demographic behaviour – including family composition, religion, social class and locality. One strategy is to compare and thus control for context in comparative research designs. Another is to try to locate ‘universal’ elements in demographic behaviour, such as transmitted physiological components. Finally, I show how the concept of long-term traditional, macro-regional family systems is being put to use in contemporary research.

Keywords: historical demography, demographic transition, family systems, fertility

Introduction

Demography, and by implication historical demography, is a highly empirical discipline dedicated to the study of vital events. It searches for the causes and implications of (changes in) fertility, family formation, migration and mortality. In doing so, issues of time and timing are always of paramount importance. Understanding the timing of life events requires knowledge of processes operating on very different time scales: physiological rhythms and cycles, nature’s seasons, economic conjuncture, family dynamics, and the *longue durée* of culture, customs and law. To the *longue durée*, one can add the genetic make-up of human beings as well as universal traits acquired

during millennia of evolution. Not surprisingly, many of the debates in historical demography revolve around conflicting interpretations of the nature of behavioural change. Disentangling the complex nexus of various processes of long and short duration will remain the core business of (historical) demography in the foreseeable future. Understanding change over time requires insight into the variability of demographic behaviour. How can we interpret demographic variation across individuals and groups, and what is the 'bottom line' of universal behaviour?

In this chapter, I present research (mostly from the last decade) and major debates from three fields of historical demographic research. The first is the ongoing quest to understand the demographic transition, the most important topic in historical demography. How did the global shift towards lower mortality and fertility rates take place? What motivated couples to limit their family size and what social processes triggered changes in motivation? Is there a connection to the other major transition, the industrial revolution? I incorporate all these and many other questions under the heading 'understanding temporal change'.

The second field can be titled 'understanding individual variation'. In the past decades, historical demographers have invested a great deal of energy in collecting information on individuals and households, and this micro-level data has yielded abundant evidence of temporal, local, social and religious variations in behaviour. The great challenge is to reconcile this variability with inherited aspects of behaviour. Vital events need to be broken down into their various constituent elements. An example is infant mortality: historical demographers aim to find out to what extent the deaths of children in a given family can be ascribed to transmitted factors (genes, child rearing practices learned by the mother, etc.), the current situation of the family (crowded household, low income, poor housing, etc.), the environment (infectious diseases) or the socio-cultural group (receptive to medical advice to a greater or lesser extent).

Finally, I focus on macro-regional research. Notwithstanding enormous local diversity, people in broadly-defined regions often share basic attitudes towards family relationships, inheritance, kin co-residence and the position of women. Recently, interest has intensified in regional marriage patterns and – more encompassing – regional 'family systems'. The question of the origin and nature of persistent regional characteristics is not only of purely academic interest. It is directly geared to the question of whether the regions of the world will converge towards the same demographic model, or whether this convergence will be delayed or not occur at all (for instance because of the persistence of old, regional family systems). Obviously, many types of

demographic forecasting and policymaking hinge on the outcome of this convergence-divergence debate.

Clearly, within the limited space allotted to this chapter, the broad fields sketched above cannot possibly be dealt with exhaustively. My aim is to discuss selected ongoing debates, where possible highlighting research on the Low Countries, within the three fields. Therefore, other topics in historical demography, such as migration, are ignored. In addition, these fields of research generally focus on the period after 1850. This stems from the urgency to explain relatively recent changes in society, the intense co-operation with the social sciences and developments in digital data collection, which are prominent for the period from 1850 to 1940. Accordingly, historiography on the period before 1850 is largely ignored. For a more comprehensive overview of the past progress of historical demography in the Low Countries, the reader is directed elsewhere.¹

Understanding temporal change

Human fertility and mortality have always been subject to strong variation between families, regions and periods. However, during the nineteenth and twentieth centuries a global shift occurred from generally high levels of fertility and mortality to lower levels. This shift began in Western Europe and has now reached virtually all parts of the world. Because of its universal and irreversible character, this change of demographic behaviour has been termed the First Demographic Transition. Historical demography has undertaken the mission to describe and explain this transition.

Initially, this seemed a relatively straightforward task. As formulated in the 1950s and 1960s, classical transition theory assumed that industrialisation, the expansion of education and increasing urbanisation would lead to smaller families everywhere, a development that occurred first in the Western world. In the process, the Malthusian 'homeostatic regime', in which population growth was held in check by limited resources, was replaced by a new, stable system of both low fertility and low mortality rates. The Princeton European Fertility Project, a large collaborative project led by Ansley Coale, began in 1963 to chart the transition by relating demographic rates of European provinces to socio-economic developments in the period from 1870 to 1960. In the project, marital fertility was contrasted with the

¹ Theo Engelen and Ad van der Woude†, 'Historical Demography in the Netherlands', and I. Devos and C. Matthys, 'A history of historical demography in Belgium' in: A. Fauve-Chamoux, I. Bolovan and S. Sogner (eds.), *A global history of historical demography* (Bern forthcoming).

'natural fertility' of the Hutterites (an orthodox religious minority group in North America who did not practice birth control), in order to detect the onset and extent of deliberate fertility control.² However, the outcomes of the project seemed to refute the tenets of classical theory: at the level of provinces, the causal links between fertility decline with mortality decline and economic change was weak, but there appeared to be a strong association with religious, linguistic and ethnic differences. Fertility decline took place along cultural dividing lines, whereas socio-economic differentials seemed to play a limited role at best. Thus, instead of an adaptation to changed economic conditions, fertility decline came to be interpreted in cultural terms and to be seen as a diffusion of innovative behaviour. This diffusion was accelerated by secularisation.

Dutch demographers faced the challenge of having to explain two conspicuous features of demographic change in their country. First, the onset of the transition had a marked regional pattern, with the northwest parts of the country being the first to demonstrate change and the southeast parts the last. Second, within Western Europe the Netherlands as a whole was a latecomer, characterised by relatively high fertility levels until the 1960s. Initially, the explanation followed classic modernisation discourse. The Dutch leading demographer E.W. Hofstee explained the changes as stemming from the demise of the traditional 'agrarian-artisanal' marriage pattern, in which fertility was held in check by late marriage, as household formation was contingent on inheriting a farm or workshop. The spread of wage labour would lead to an 'intermediate' period of earlier marriages and high fertility, until people adopted modern birth control techniques to limit family size.³ Their willingness to do so presupposed an attitude of self-determination, which in Hofstee's view was part of modern culture that first emerged in the North and West, and spread gradually across the country. His model was not very convincing, either empirically or theoretically. According to two of his opponents, F. van Heek and J.D. Buissink, the regional pattern in Dutch fertility decline could best be explained by the predominance of Roman Catholics in the South, in combination with the Catholic opposition to birth control.⁴ Hofstee argued that because

2 Ansley J. Coale and Susan Cotts Watkins (eds.), *The Decline of Fertility in Europe* (Princeton 1986).

3 Evert W. Hofstee, 'Regionale verscheidenheid in de ontwikkeling van het aantal geboorten in Nederland in de 2^{de} helft van de 19^{de} eeuw', *Akademiedagen VII* (1954) 59-100. A good overview of the debate is given in Theo Engelen, *Van 2 naar 16 miljoen mensen. Demografie van Nederland, 1800-nu* (Meppel 2009).

4 F. van Heek, *Het geboorte-niveau der Nederlandse Rooms-Katholieken. Een demografisch-sociologische studie van een geëmancipeerde minderheidsgroep* (Leiden 1954); J.D. Buissink,

the fertility levels of Catholics differed across regions, religion played a minor role. However, Hofstee recognised the vital importance of religion to explain why the Netherlands differed from neighbouring countries. In his view, 'organised confessionalism' (synonymous with pillarisation) led to a strong emphasis on morality and sexual propriety, even among non-religious groups ('asymmetric tolerance'), and thus a relatively strong resistance to 'immoral' birth control techniques.⁵

In subsequent research, scholars have tried to solve the debate by weighing the relative contributions to fertility decline of social and economic 'modernisation' on the one hand and religion on the other. First, O. Boonstra and A. van der Woude showed that whereas religious denomination explained much of the synchronous variation between communities, change over time was better explained by socio-economic variables.⁶ Second, T.L.M. Engelen and J.H.A. Hillebrand tried to combine both elements in a 'motivation-acceptation' model. Motivation comes from the realisation that having fewer children brings economic benefits, coupled with the awareness that declining infant mortality implies fewer births are necessary to reach a target family size. The acceptance of deliberate birth control can be slowed down by religious inhibitions, however, over time this 'filter' becomes weaker, leading to a more direct impact of economic factors on fertility decisions. Engelen and Hillebrand's model proved successful in explaining developments in respectively the provinces of Limburg,⁷ and Utrecht and Groningen.⁸ Recently, H. Knippenberg and S. de Vos confirmed the value of the model for the entire Netherlands, but they also argued that religion deserves an even more prominent place. Dutch pillarisation implies that a popular attachment to churches (especially among those who sided with political emancipation movements), effective control mechanisms by these churches, and pronatalist tendencies, all led to strong effects on sexuality and fertility.⁹ Knippenberg and de Vos argued that the different

De analyse van regionale verschillen in de huwelijksvruchtbaarheid (Delft 1970).

5 E.W. Hofstee, *Korte demografische geschiedenis van Nederland van 1800 tot heden* (Haarlem 1981).

6 O. Boonstra and A. van der Woude, 'Demographic transition in the Netherlands. A statistical analysis of regional differences in the level and development of the birth rate and of fertility, 1850-1900', *AAG Bijdragen* 24 (1984) 1-57.

7 T.L.M. Engelen, *Fertiliteit, arbeid, mentaliteit: de vruchtbaarheidsdaling in Nederlands-Limburg, 1850-1960* (Assen/Maastricht 1987).

8 J.H.A. Hillebrand, *Van motivatie naar acceptatie. De vruchtbaarheidsdaling in Groningen en Utrecht* (Nijmegen 1991).

9 Hans Knippenberg and Sjoerd de Vos, 'Tussen crisis en verzuiling: regionale verschillen in vruchtbaarheid in Nederland tijdens het interbellum', in: Jan Kok and Jan van Bavel (eds.), *De levenskracht der bevolking. Sociale en demografische kwesties in de Lage Landen tijdens het*

speed of dismantling of the 'pillars' (and even re-pillarisation in the case of evangelical and orthodox Protestantism) led to marked shifts in the regional pattern of fertility. In the 1960s, the Roman Catholic 'pillar' broke down very fast, leading to very low fertility in the South.¹⁰ Although these findings seem to vindicate the position of van Heek and Buissink, other researchers have claimed that socio-economic factors still warrant closer inspection. P. Klep connected fertility decline to the post-war demise of small family farms in the sandy regions. Once children realised there was no longer a family fund on which they could lay a claim, they were liberated from parental control and restrictions on marrying.¹¹ In addition, J. Schellekens and F. van Poppel have recently concluded that Dutch fertility decline can be explained in the most part by mortality decline, rising real wages and unemployment.¹²

Individual motivations to adopt or refrain from birth control are just one part of the story. Another part is formed by the social dynamics that explain how, in some groups or regions, new behaviour spread faster than in others. Following the European Fertility Project, diffusion theory has become the dominant paradigm.¹³ The dynamics of diffusion can be perceived as social learning (the flow of information between individuals), but also as social influence (competition with others, emulating social superiors, and social coercion). Surprisingly few studies have really tried to trace how behavioural change was copied by one group from another. In the Netherlands, Hillebrand showed the importance of dialect groups – and thus shared culture – in Groningen province.¹⁴ In his study on fertility decline in Leuven, J. van Bavel showed that Flemish couples living in neighbour-

interbellum (Leuven 2010) 109-140; Hans Knippenberg and Sjoerd de Vos, 'Een opmerkelijke omslag: het veranderde geografische patroon van de huwelijksvruchtbaarheid in Nederland tijdens de culturele revolutie van de jaren zestig en zeventig', in: Koen Matthijs, Bart Van de Putte, Jan Kok and Hilde Bras (eds.), *Leven in de Lage Landen. Historisch-demografisch onderzoek in Vlaanderen en Nederland* (Leuven 2010) 187-209. See also Kevin McQuillan, 'When Does Religion Influence Fertility?', *Population and Development Review (PDR)* 30 (2004) 25-56.

10 Marloes Schoonheim, *Mixing ovaries and rosaries. Catholic religion and reproduction in the Netherlands, 1870-1970* (Amsterdam 2005).

11 Paul M.M. Klep, 'Kleine boeren en grote gezinnen in crisistijd (1920-1970) – een nieuwe these', in: Jan Kok and Jan van Bavel (eds.), *De levenskracht der bevolking. Sociale en demografische kwesties in de Lage Landen tijdens het interbellum* (Leuven 2010) 141-196; Paul M.M. Klep, *Gezins-solidariteit en rotten kids. Schaarste, seks en het vierde gebod op het platteland in Nederland in de twintigste eeuw* (Nijmegen 2011).

12 Jona Schellekens and Frans van Poppel, 'Marital fertility decline in the Netherlands: child mortality, real wages, and unemployment, 1860-1939', *Demography* 49 (2012) 965-988.

13 John B. Casterline, 'Diffusion Processes and Fertility Transition: Introduction', in: John B. Casterline (ed.), *Diffusion Processes and fertility transition. Selected perspectives* (Washington 2001) 1-38.

14 Hillebrand, *Van motivatie naar acceptatie*.

hoods with Walloons stopped having children earlier than in non-mixed neighbourhoods.¹⁵ Research on the paths of diffusion includes the work of C. Matthys, who tested the hypothesis that Flemish rural girls working in urban, bourgeois households gained knowledge of limiting family size and brought that to their own marriages.¹⁶ However, this role of employers was not confirmed and Matthys suggests that instead, servant girls were influenced more by neighbours, family and friends. She concluded that social learning might have been less important than other types of social influence, such as social coercion. In her recent book on four Dutch cities, A. Janssens also looked at the workplace, in particular the factory floor, as the locus of exchange of knowledge on birth control practices.¹⁷ Other researchers have studied the extent to which the fertility behaviour of migrants (for instance to Charleroi or Antwerp) was influenced by their new neighbours, or vice versa. Of course, there is a need to separate potential diffusion effects from other aspects of migration that might affect couples' fertility decisions (for instance difficulties in adjusting to new surroundings and the selection effects of migration).¹⁸

Apart from the difficulties in locating and proving the diffusion of innovative behaviour, the notions of both 'innovation' and 'transition' have recently come under attack. I first examine the innovative character of birth control. According to many authors, populations have always been able to control the number of their offspring and what changed during the nineteenth century was initially the *intensity* of control and only later the methods.¹⁹ Ethnographers have for a long time documented the contra-

15 Jan van Bavel, 'Diffusion effects in the European fertility transition: Historical evidence from within a Belgian town (1846-1910)', *European Journal of Population* 20 (2004) 63-85.

16 Christa Mattys, 'Domestic servants and diffusion of fertility control in Flanders', *History of the Family. An International Quarterly* 18 (2013) 456-480; Christa Matthys, *Sex and the city. Servants and the diffusion of fertility control in Flanders, 1830-1930*. (Unpublished doctoral dissertation, Ghent University (Ghent 2012).

17 Angélique Janssens, *Labouring Lives. Women, work and family formation in the Netherlands, 1880-1960* (Bern 2014).

18 Thierry Eggerickx, 'The fertility decline in the industrial area of Charleroi during the second half of the nineteenth century. Did sedentary and migrant people have a different behaviour?', *Belgisch Tijdschrift voor Nieuwste Geschiedenis – Revue belge d'histoire contemporaine* 9 (2001) 403-429; Reto Schumacher, Koen Matthijs and Sarah Moreels, *Migration and reproduction in an urbanizing context. A sequence analysis of family life courses in 19th century Antwerp and Geneva*. Working Paper of the Scientific Research Community Historical Demography WOG/HD/ 2012-17.

19 Simon Szreter, *Fertility, Class and Gender in Britain, 1860-1940* (Cambridge 1996); Jan van Bavel, 'Deliberate birth spacing before the fertility transition in Europe: evidence from nineteenth-century Belgium', *Population Studies* 58(2004) 95-107; Jan van Bavel, 'Birth spacing as a family strategy. Evidence from 19th century Leuven, Belgium', *The History of the Family: An*

ceptive methods employed in non-Western societies. Recently, historical demographers have demonstrated that conscious birth spacing, for instance due to expected increases in food prices, was practiced by pre-transition European populations.²⁰ Birth spacing intensified during the first stage of the fertility decline, for example through protracted breastfeeding. Even in the twentieth century, traditional contraceptive methods such as abstinence and withdrawal remained the most important techniques for married couples, at least in England.²¹

The notion of a transition from one 'stable' situation to another has been put into perspective. Notable fluctuations in fertility occurred both before and after the transition. In fact, in no way can twentieth-century demography be described in terms of a 'stable demographic regime'. First, in the inter-war period many Western countries had already experienced levels of fertility lower than necessary to maintain population levels. With hindsight, low fertility in this period has been interpreted as the effects of unemployment and looming war, but contemporary commentators were blaming the remarkable increase of childless or one-child families on changing life styles. Many couples were hesitant to give up newly-won luxuries and holidays, and supposedly decided to have no or few children.²² At the time, most demographers expected low fertility to last, and therefore the 'baby boom' came as a great surprise. Contrary to what is often assumed, the boom was not simply related to catching-up effects because family formation had been delayed by the Second World War. In fact, in many countries the upward trend in fertility was already apparent in the late 1930s or early 1940s. Moreover, the baby boom also occurred in neutral countries such as Portugal and Sweden. So far, no convincing explanation has been offered for this remarkable turn of events. A likely prime candidate is the 'opportunity costs' of children for women. Post-war wages rose faster

International Quarterly 8 (2003) 585-604; Josef Ehmer, 'The significance of looking back: fertility before the 'fertility decline'', *Historical Social Research* 36 (2011) 11-34.

20 Tommy Bengtsson and Martin Dribe, 'Deliberate control in a natural fertility population: Southern Sweden, 1766-1864', *Demography*, 43 (2006) 727-746; Martin Dribe and Francesco Scalone, 'Detecting Deliberate Fertility Control in Pre-transitional Populations: Evidence from six German villages, 1766-1863', *European Journal of Population* 26 (2010) 411-434.

21 Simon Szreter and Kate Fisher, *Sex before the sexual revolution. Intimate life in England 1918-1963* (Cambridge 2010). For Flanders, see Christa Mattys and Isabelle Devos, "'Gij doet uw plichten niet, man?" De houding van mannen ten opzichte van seksualiteit en geboortebeperving in Vlaanderen, 1900-1940', Working Paper 2012-2, EED Working Paper Series, Universiteit Gent.

22 For an overview, see Jan van Bavel, 'Subreplacement fertility in the West before the baby boom: past and current perspectives', *Population Studies* 64 (2010) 1-18; for The Netherlands, Jan van Bavel and Jan Kok, 'Pioneers of the Modern Lifestyle? Childless Couples in the Early Twentieth-Century Netherlands', *Social Science History* 34 (2010) 47-72.

for men than for women, enlarging the gender gap, which stimulated the 'bread-winner model' of women staying at home with children. Further, work opportunities for young women deteriorated compared with those for older women, who found work during the war and held on to their jobs afterwards. Their retirement in the 1960s finally expanded the opportunities for younger women and heightened the opportunity costs of children. There are various other explanations, all awaiting a more careful examination on the basis of micro-level data.²³

The ensuing 'baby bust' of the 1970s and after is generally seen as an integral element of the sweeping changes in marriage and the family, labelled as the Second Demographic Transition. According to many influential demographers, the past decades have produced nothing short of a revolution in demographic behaviour, the outcome of which is still highly uncertain. The cause is believed to be a change in the value structure of Western, and increasingly also non-Western, societies. The rise in the standard of living reached in the 1960s and after has, basically for the first time in human history, created the opportunity to fulfil 'postmaterialist' needs. These needs are recognition, freedom of expression and self-fulfilment.²⁴ According to the theory, self-fulfilment implies in general a weaker commitment to lasting relationships, leading to a delay in family formation, an increase in living alone and an increase in divorce rates. It is also reflected in cohabitation and in having fewer children. According to R. Lesthaeghe and other demographers, this is a virtual new transition, not just the next stage of the First Demographic Transition. They argue that whereas the First Transition was triggered by the desire to give (a smaller number of) children better opportunities, the Second Transition is solely the result of self-fulfilment. However, there appears to be a continuity in the clustering of the forerunner regions between the First and Second Demographic Transitions, suggesting the persistence and predominance of cultural factors (in particular secularisation) underlying behavioural change.²⁵

The notion of the Second Demographic Transition is hotly debated. Doubts have been raised about the universal, uniform and irreversible

23 Jan van Bavel and David Reher, 'The baby boom and its causes: what we know and what we need to know', *PDR* 39 (2013) 257-288.

24 Ron Lesthaeghe, 'The unfolding story of the second demographic transition', *PDR* 36 (2010) 211-251; Dirk J. van de Kaa, 'Postmodern fertility preferences: From changing value orientations to new behavior', in: Rodolfo A. Bulatao and John B. Casterline (eds.), *Global fertility transition* (New York 2001) 290-331.

25 Ron Lesthaeghe and Karel Neels, 'From the first to the second demographic transition: an interpretation of the spatial continuity of demographic innovation in France, Belgium and Switzerland', *European Journal of Population* 18 (2002) 325-360.

character of the changes, and especially about the dominant role of ideational factors.²⁶ For instance, the notion that self-fulfilment leads to (very) low fertility has been criticised now that fertility is rising again in the Scandinavian countries that were forerunners in the Second Demographic Transition, as well as in several other European countries.²⁷ Other researchers have demonstrated that the spread of cohabitation and extra-marital births in Eastern Europe is not so much the result of 'post-materialist' self-fulfilment, but results from the problems faced by an impoverished rural population after the fall of Communism.²⁸

In fact, doubts have also been raised about the 'transitional' (in the sense of being unique, universal and irreversible) character of the First Demographic Transition. According to S. Szreter, the transition discourse has to be placed alongside other modernisation models that were constructed in the 1960s, but which were basically a reflection and backward projection of the characteristics of (American) society of the time. In the 1960s, rational family planning had become the norm, which was made effective by new techniques such as the pre-lubricated condom and the pill. Szreter asserts that the contemporary small-family norm was then projected onto the historical development of fertility decline. This meant a search for 'modern' elements in the past, which supposedly caused the decline of fertility in the period after 1860. Szreter calls this 'an unwarranted, arbitrary and a-historical imposition' and a clear example of a teleological 'Whig interpretation of history'.²⁹ In his view, people have always adjusted their fertility in response to the examples of large or small families surrounding them. Such examples were many, simply because of biological variation in human fertility. What is crucial is a shift towards the perception that having fewer children brings more advantages. Where, when and to what extent this shift took place depended very much on local factors and historical contingency. A central question in Szreter's research is how reference groups or 'communicating communities' are constituted. In England, people were influenced greatly by class and interpersonal relations on the work floor. Moreover, gender relations (including the possibilities for

26 Simon Szreter, 'Theories and heuristics: how best to approach the study of historic fertility declines?' *Historical Social Research* 36 (2011) 65-98, in particular 72,77.

27 David Coleman, 'Why we don't have to believe without doubting in the "Second Demographic Transition" –some agnostic comments', *Vienna Yearbook of Population Research* (2004) 11 – 24; see also <http://podcasts.ox.ac.uk/03-second-demographic-transition-new-forms-family-slides-document>.

28 Traian Rotariu, 'A few critical remarks on the culturalist theories on fertility with special view on Romania's situation', *Romanian Journal of Population Studies* 3 (2009) 11-32.

29 Szreter, 'Theories and heuristics', 75 and 66.

husbands and wives to negotiate sexuality and birth control) also varied by social groups and local communities (for instance mining versus textile towns).³⁰ However, in other areas and periods the ‘communicating communities’ in which people determine the benefits of having children may have a different nature, for example they could be religious groups.³¹ Thus, according to Szreter there has not been a single transition, but instead ‘many geographically and chronologically disparate processes occurring in distinct contexts and for different reasons’.³² Historians should try to learn from the differences between these processes, and not ‘attempt to impose a grid of similarity’.³³

For Szreter, the costs and benefits of a large or small family size – as they are perceived within communicating communities – are key to whether change occurred. His approach might be combined with one that emphasises the competitive social environment in which families try to realise ‘reproductive success’. The central question is: when and how did the content of ‘success’ change from having a large number of children to having a small number of better-supported children? In this respect, the recent research of N. Cummins is of interest.³⁴ His approach has an evolutionary element, in that it builds on the notion that humans have evolved to strive for economic and social success.³⁵ In traditional societies, this often translated into large families, as having many children added to the family’s power base and the cost of raising children was spread between the extended kin. However, economic modernisation resulted in more *opportunity* for economic and social success, in the meantime breaking down the traditional kinship networks. This breakdown meant that the costs of having children shifted more and more to the parents alone. Once some parents started to concentrate their resources on small numbers of children, other parents had to do the same if their offspring were to

30 Szreter, *Fertility, Class and Gender*. Also, S. Pooley, Parenthood, child-rearing and fertility in England, 1850-1914, *The History of the Family*, 18 (2013) 83-106.

31 Szreter, ‘Theories and heuristics’, 85.

32 Szreter, *Fertility, class and gender*, 364, cited in Mikolaj Szoltysek, ‘Science without Laws? Model Building, Micro Histories and the Fate of the Theory of Fertility Decline’, *Historical Social Research* 32 (2007) 10-41, in particular 27.

33 Szreter, ‘Theories and heuristics’, 69.

34 Neil J. Cummins, *Why Did Fertility Decline? An Analysis of the Individual Level Economic Correlates of the Nineteenth Century Fertility Transition in England and France*. PhD Thesis London School of Economics (London 2009); Neil J. Cummins, ‘Marital fertility and wealth during the fertility transition: rural France, 1750-1850’, *The Economic History Review* 66 (2013) 449-476.

35 Also Kevin MacDonald, ‘An evolutionary perspective on human fertility’, *PDR* 21 (1999) 223-246; Bobbi S. Low, *Why sex matters. A Darwinian look at human behavior* (Oxford and Princeton 2000) 144-145.

be socially competitive. This is why the fertility transition bears all the characteristics of an innovation diffusion, but the social dynamics involved are much more important than the actual 'innovation'. Cummins applied his model to the fertility declines of France and England, which so clearly defied easy associations with the industrial revolution. He showed that the decline in fertility started much earlier in France because there the *opportunity* for status advancement through smaller families was present much earlier than in England. At present, his social mobility model seems best suited to explain the role of forerunners in the fertility decline. However, to date empirical evidence is limited. Some examples from the Low Countries include the work of Van Bavel, who has shown that for Leuven, children from large families had higher odds of ending up in a lower class and lower odds of upward mobility. He concluded: 'Fertility can be expected to decline when society evolves in such a way that lower fertility enhances the probability that children climb the social ladder, assuming that there would be an evolved motive disposition for upward mobility'.³⁶ Recently, Bras et al. have shown that in the Netherlands during the nineteenth century the negative relation between family size and social status of the children (measured at the time of their marriage) became stronger.³⁷

What has become clear from this brief overview is that alternative interpretations of temporal change in demographic behaviour are abundant and we are still a long way from a comprehensive interpretation of the demographic transition, if this is even possible. However, this makes for a fascinating and vibrant field of research.

Understanding individual variation

Until well into the 1980s, historical demography was focused on mapping and contrasting regionally aggregated data, in order to understand the epidemiological and fertility transitions of the nineteenth and twentieth centuries. Since then, the availability of new data sources and the develop-

36 Jan van Bavel, 'The effect of fertility limitation on intergenerational social mobility: the quality-quantity trade-off during the demographic transition', *Journal of Biosocial Science*, 38 (2006) 553-569, in particular 567. See also Jan van Bavel, Sarah Moreels, Bart van de Putte and Koen Matthijs, 'Family size and intergenerational social mobility during the fertility transition. Evidence of resource dilution from the city of Antwerp in nineteenth century Belgium', *Demographic Research*, 24 (2011) 313-344.

37 Hilde Bras, Jan Kok and Kees Mandemakers, 'Sibship Size and Status Attainment across Contexts: Evidence from the Netherlands, 1840-1925', *Demographic Research* 23 (2010) 73-104, 96.

ment of appropriate analytical techniques have allowed a shift of research focus to individuals and households. A pioneering role in this regard has been played by the Historical Sample of the Netherlands (HSN), which since the early 1990s has been based at the International Institute of Social History. In this project, the life courses of about 80,000 randomly sampled people are being reconstructed, by linking civil records (certificates of birth, marriage and death) to the population registers. The (publicly accessible) database has proved an invaluable resource for studies into social mobility, marriage, migration, (infant) mortality and household composition.³⁸ So far, more than three hundred scholarly publications have been based on HSN data. In Flanders, a similar project covers the Antwerp area.³⁹ As stated in the introduction, the exploration of these new digital sources has led to a strong focus on the period from 1850 to 1940.

Using linkages between records and reconstructed life courses, historical demographers are increasingly able to study demographic events (marriages, births, migrations and deaths) in terms of the preceding *processes*. These processes of, respectively, family formation, adjustment to labour market opportunities, and health and ageing are being deconstructed into their component factors and sub-processes. Understanding demographic outcomes means understanding how the economic resources of households constrain or enable people in terms of the choices they make (for instance to marry or to migrate), how culture sets normative parameters or 'life scripts' for these choices (and in doing so expands or limits the leeway for individual agency),⁴⁰ and how the environment (ecological, infrastructural, economic, etc.) interacts with individual capacities to realise life plans. Many studies have emerged, showing on the one hand notable differences between regions, religious groups and social classes, and on the other hand, huge individual-level variation within these regions, groups and classes. Researchers are still struggling to come to grips with these two forms of variation. Currently, efforts are being made to move forward and to propose models to explain variations in individual and group demographic outcomes. The first approach is to design large comparative studies,

38 For an overview of studies using the Historical Sample of the Netherlands, see Jan Kok, Kees Mandemakers and Hilde Bras, 'Van geboortebank Sample tot *collaboratory*. Een reflectie op twintig jaar dataverzameling en onderzoek met de HSN', *Tijdschrift voor Sociale en Economische Geschiedenis* 6 (2009) 3-36.

39 Koen Matthijs and Sarah Moreels, 'The Antwerp COR*-database: A unique Flemish source for historical-demographic research', *The History of the Family. An International Quarterly* 15 (2010) 109-115.

40 See the special issue on historical research on cultural life scripts, *Historical Social Research* 2014, guest editors O. Boonstra, H. Bras and M. Derks.

spanning long periods and studying variation using the same categories and techniques, in different ecological and economic settings. The other approach is to search for the 'bottom line' in variation,⁴¹ or to determine to what extent demographic behaviour is transmitted, either from the parents or in the form of behavioural traits that have emerged during the evolution of the human race. An example is the notion that humans will always strive for successful offspring, as previously detailed. By understanding the transmitted element in behaviour, demographers can move on to unravel the interplay between contextual constraints and individual choices. In the remainder of this section, I discuss some examples of these approaches, again without any claim to completeness.

An example of the first approach is the study of social class differentials in adult mortality. This has been on the agenda since the middle of the nineteenth century, when, among others, Friedrich Engels claimed that industrialisation and capitalist exploitation worsened the living conditions of the poor. In this period, epidemics were receding, making individual fitness and resistance more important factors in mortality. According to the 'pessimists', the increasing gap in living standards during industrialisation leads to stronger social-class gradients in mortality. In the later stage of modernisation, the gap is believed to become smaller again. Others, however, suggest a more constant social-class gradient, as the socially advantaged will always be more able to translate their power and income into better health (in the present day in the form of a healthier life style). In a recent comparative project covering four centuries in urban and rural settings in Canada, Switzerland, Sweden, Italy, the Netherlands and the United States, these hypotheses have been tested using the same class scheme and the same methods.⁴² The outcomes refute both the 'pessimist' hypothesis on increased differences during industrialisation and the 'constancy' hypothesis. No increase was found in social class differences, at least not related to industrialisation. Increases that did occur were linked to urbanisation and population density, and in some areas took place well before the Industrial Revolution. Mainly after 1900, social class differences receded. In the Netherlands, mortality differences were rather strong among young adults (aged 17-35) born between 1850 and 1882. In that cohort, semi-skilled workers fared rather poorly compared with other social groups.⁴³

41 Low, *Why sex matters*, 142.

42 Published in the special issue (Tommy Bengtsson and Frans van Poppel eds.), *Socioeconomic inequalities in death, Explorations in Economic History* 48 (2011).

43 Tommy Bengtsson and Frans van Poppel, 'Socioeconomic inequalities in death from past to present: An introduction', *Explorations in Economic History* 48 (2011) 343-356.

In the second approach to understanding diversity, we can discern several strands. These range from testing ideas from evolutionary biology or setting up research designs to uncover intergenerational transmission, to linking genealogical family trees with DNA samples taken from descendants.

In recent studies, the relevance of evolved human traits for understanding (historical) demographic behaviour has been tested. One example is the notion that the human race stands out compared with other animals by the role the kin group plays in rearing children. It has been suggested that through evolution, women have developed a relatively early menopause in order to help their daughters with raising children.⁴⁴ The notion of cooperative breeding or the 'grandmother hypothesis' has been tested using data from several villages, studies in developing countries and historical family reconstitutions.⁴⁵ Overall, maternal grandmothers appear the most reliable 'helpers at the nest'. In fact, even in a modern, industrialised country such as the Netherlands, care given by grandmothers stimulates their daughters' fertility.⁴⁶ At the moment, research is focused on how different types of kin, either co-resident or not, are helpful in keeping children alive, or in stimulating fertility.⁴⁷

There are at least five pathways that may explain the intergenerational inheritance of demographic behaviour. These are: primary socialisation, parental control, the inheritance of resources, shared environment, and the transmission of genetically-based traits. In their first years, children learn mainly from their parents, in particular the mother. This process of learning typically occurs without any conscious effort. When learned ideas come to be perceived as personal, freely-chosen points of view, this primary socialisation leads to conformity between parents and children.⁴⁸ Second, behavioural conformity can also be the result of control by the parents,

44 For an overview of the literature, see Jan Beise and Eckart Voland, 'A multilevel event history analysis of the effect of grandmothers on child mortality in a historical German population (Krummhorn, Ostfriesland, 1720-1874)' *Demographic Research* 7 (2002) 469-498.

45 For an excellent overview, see Rebecca Sear and David Coall, 'How much does family matter? Cooperative breeding and the demographic transition', *PDR* 37 (2011) 81-112.

46 Ralf Kaptijn, Fleur Thomese, Theo van Tilburg and Aart C. Liefbroer, 'How grandparents matter. Support for the cooperative breeding hypothesis in a contemporary Dutch population', *Human Nature* 21 (2010) 393-405.

47 See, for instance, the research project The Power of the Family (Hilde Bras), <http://www.ru.nl/hlcs/programma's/public-and-private/the-socio-cultural/related-projects/the-power-the-family/>.

48 See for a more extensive explanation, Jan van Bavel and Jan Kok, 'Social control and the intergenerational transmission of the age at marriage, rural Holland 1850-1940', *Population-E*, 64 (2009) 343-360.

and may occur even without the internalisation of the norms upheld by the parents. Third, resemblance in demographic behaviour between parents and children can result from sharing social status characteristics – for instance economic resources – that influence behaviour in both generations. Fourth, in the absence of migration, both generations share the same environment, and face to some extent the same economic and ecological constraints. Finally, the inheritance of genes may also lead to similarities between parents and children. These may include innate diseases, but also personality traits. Clearly, it is very difficult to separate the different influences of resources, environment, socialisation, discipline and genes in the intergenerational transmission of behaviour.

This recent attention to generations has enriched several fields, among others the study of infant and child mortality. Increasingly, scholars have become aware that early-life mortality was often clustered in families. In other words, a relatively large proportion of all deaths occurred in a relatively small number of families. To understand properly the trends and local variation in infant mortality we need to know more about this phenomenon. Factors that may account for the clustering include the mother (her age, fecundity, inherited genetic disorders, disease profile, level of education, training in hygiene and breastfeeding habits), the household (income and composition) and the community (ecology and disease environment).⁴⁹ For the Netherlands, a recent study has shown that infant death clustering was unevenly spread, being very strong in the province of Zeeland. Further, the study revealed that part of the explanation lies in the competition between young children for care, attention and resources within households. The mother's health was also important, which was indicated by a strong association between stillbirths and infant mortality; if a mother has poor health, she has more births with low gestational ages and low birth weights.⁵⁰ To their surprise, Janssens and B. Pelzer were able to attribute infant deaths in Enschede and Tilburg completely to the 'usual suspects' such as twin births, the preceding birth interval and the age of the mother. Therefore, there appears to be limited explanatory space for bad childrearing practices, at least in these cities.⁵¹ Finally, working on data for the nineteenth-century

49 See Sören Edvinsson and Angélique Janssens, 'Clustering of deaths in families: infant and child mortality in historical perspective', *Biodemography and social biology* 58 (2012) 75-86.

50 Frans van Poppel, Govert Bijwaard, Peter Ekamper and Kees Mandemakers, 'Historical trends in the correlation of sibling deaths in infancy in The Netherlands', *Biodemography and Social Biology* 58 (2012) 87-115.

51 Angélique Janssens and Ben Pelzer, 'Did factory girls make bad mothers? Women's labor market experience, motherhood, and children's mortality risks in the past', *Biodemography and Social Biology* 58 (2012) 2, 133-148.

Antwerp population, M. Vandezande and K. Matthijs found that death clustering is truly transmitted across the generations. If a mother had lost many siblings, she was more likely to lose children herself, even when all other factors were controlled for.⁵²

The literature shows that the strength and pathways of intergenerational transmission differ by context, sub-group and period. Fascinatingly, the effects generally become stronger in the more recent period. The more social pressure on behaviour recedes and the more individual autonomy is present, the stronger the similarities between the generations become. This indicates that there is a greater possibility to achieve (socialised) preferences.⁵³ In the Low Countries, in addition to mortality the role of intergenerational transmission has been documented for fertility,⁵⁴ age at marriage⁵⁵ and adolescent height.⁵⁶ We can expect this field to expand, for instance through research designs comparing the demographic fates of siblings.

Finally, until recently genes have worked as a 'black box' in transmission research by historical demographers. Conversely, geneticists often faced problems in determining the long-term impact of specific chromosomes and in controlling for social factors. Interdisciplinary projects in which both disciplines join forces and DNA is taken from the descendants of specific groups of interests (for instance very old people) offer a promising way forward.⁵⁷

52 Mattijs Vandezande and Koenraad Matthijs, 'Inherited dimensions of infant mortality. Detecting signs of disproportionate mortality risks in successive generations, *The History of the Family* 18 (2013) 169-186.

53 Mike Murphy, 'The intergenerational transmission of reproductive behaviour: comparative perspective, *The History of the Family* 18 (2013) 107-115.

54 Hilde Bras, Jan van Bavel and Kees Mandemakers, 'Unraveling the intergenerational transmission of fertility: genetic and shared-environment effects during the demographic transition in the Netherlands, 1810-1910', *The History of the Family* 18 (2013) 116-134.

55 Frans Van Poppel, Christiaan Monden and Kees Mandemakers, 'Marriage timing over the generations', *Human Nature*, 19(2008)7, 7-22.

56 George Alter and Michel Oris, 'Effects of Inheritance and Environment on the Heights of Brothers in Nineteenth-Century Belgium', *Human Nature* 19 (2008) 44-55.

57 John Hobcraft, 'The ABC of demographic behaviour: How the interplay of alleles, brains, and contexts over the life course should shape research aimed at understanding population processes', *Population Studies*, 60 (2006) 153-187; Maarten Larmuseau, Anneleen van Gestelen, Mannis van Oven and Ronny Decorte, 'Genetic genealogy comes of age – Perspectives on the use of deep-rooted pedigrees in human population genetics', *American Journal of Physical Anthropology* 150 (2013) 505-511.

Understanding regional persistence

We have seen that historical demographers work hard to break down aggregated demographic patterns into highly context-specific behaviour. Behavioural variation is traced at the level of the individuals, their ancestors and families, and their social groups. However, simultaneously we see an increased interest in demographic similarity across broad regions. Discussions have intensified on how to classify such regions, where to look for the origins of their commonality and how to interpret the persistence of demographic traits. Such macro regions are often described in terms of 'family systems'. A family system can be seen as the cultural mould shaping (family) relations and demographic behaviour. There are several reasons for this renewed interest in family systems. First, the intensified global co-operation of scholars (in which the Internet plays a major role) has led to an increase in comparative studies. For these studies, the notion of family systems serves as a good starting point to examine differences in, for example, age at marriage, leaving home, or mortality, and relate these to hierarchical relations between family members.⁵⁸ In the Netherlands, the concept is being used to connect regional variation in terms of co-residence and inheritance to demographic differences.⁵⁹ Second, for New Institutional Economics, family relations and demographic norms are among the historical institutions to be incorporated in models explaining the pathways of economic growth.⁶⁰ In addition, family systems have been linked to the emergence of other institutions, such as pension systems,⁶¹ and they are related to the position of women and the global differences in their relative

58 E.g. Michel Oris and Emiko Ochiai, 'Family crisis in the context of different family systems', in: Renzo Derosas and Michel Oris (eds.), *When dad died. Individuals and families coping with distress in past societies* (Bern 2002) 17-79; Theo Engelen and Arthur P. Wolf (eds.), *Marriage and the Family in Eurasia. Perspectives on the Hajnal hypothesis* (Amsterdam 2005); Noriko O. Tsuya, Feng Wang, George Alter and James Z. Lee (eds.), *Prudence and pressure. Reproduction and human agency in Europe and Asia, 1700-1900* (Cambridge Mass 2010).

59 For example, Bianca Suanet and Hilde Bras, 'De plek in de kinderrij. Geboorteplaats en huwelijktiming in vijf Nederlandse provincies, 1840-1922', in: Koen Matthijs, Jan Kok and Hilde Bras (eds.), *Leren van historische levenslopen* (Leuven 2012) 181-198.

60 For example, Gilles Duranton, Andrés Rodríguez-Pose and Richard Sandall, 'Family types and the persistence of regional disparities in Europe', *Economic Geography*, 85 (2009) 23-47.

61 Vincent Galasso and Paola Profeta, 'When the state mirrors the family. The design of pension systems'. CESIFO Working Paper 3191 (2010). For a more general discussion of the relation to welfare systems, Pier P. Viazzo, 'Family, kinship and welfare provision in Europe, past and present: commonalities and divergences', *Continuity and Change* 25 (2010) 137-159.

'agency'.⁶² Finally, demographers are debating the extent and rate at which the world is showing convergence in demographic behaviour. The answer is of vital importance for making proper forecasts of population growth. Lower speeds of convergence or even divergent patterns are often attributed to the ongoing influence of culture and tradition, defying reduction to variables such as economic growth or urbanisation.⁶³

To date, however, no agreement has been reached on what these family systems actually are. Depending on the type of family norms and practices considered most important, different authors have created different typologies. The typology created by J. Hajnal was highly influential on subsequent research. Hajnal was the first to show that compared with the rest of the world, family formation in Northwest Europe was characterised by late and infrequent marriage.⁶⁴ In relation to late marriage, the area stood out with regard to the temporary period of serving in different households (lifecycle service) and neolocal household formation. Another rather influential typology, based on the combination of co-residence and inheritance practices, has been developed by E. Todd.⁶⁵ In his view, family systems stand for persistent elementary inter-personal relationships, which are transmitted from one generation to the next and form the foundations for global variation in attitudes towards equality and authority. Partible inheritance means equality among siblings, at least among brothers, whereas impartibility sets one favoured child apart from the others. Authoritarian family systems prescribe the co-residence of married children with their parents (stem or joint families), whereas in non-authoritarian systems, the neolocal residence of married couples is the preferred pattern. Based on differences in kinship ties, D. Reher has sketched 'weak' and 'strong' family systems in respectively Northwest and Southern Europe.⁶⁶

Labelling and contrasting whole regions has been attacked from many sides. Some scholars have stated that the abundant local variation in demography discredits the notion of macro-regional family systems. Others have stated the opposite, by suggesting that the historical and contemporary variation in kin co-residence is basically a function of the share of agriculture

62 Karen O. Mason, 'Gender and Family Systems in the Fertility Transition', *PDR*, 27 (2001) 160-176; Göran Therborn, *Between sex and power. Family in the world, 1900-2000*. London 2004; <http://www.cgeh.nl/agency-project>.

63 A good discussion of the time layers involved in global convergence is Göran Therborn, *The world. A beginner's guide* (Cambridge 2011).

64 John Hajnal, 'Two kinds of pre-industrial household formation systems', *PDR* 8 (1982) 449-494.

65 In several books, among which Emmanuel Todd, *L'Invention de l'Europe* (Paris 1990).

66 David S. Reher, 'Family ties in Western Europe: Persistent Contrasts', *PDR*, 24 (1998) 203-234.

in the economy.⁶⁷ Some have rejected thinking in terms of family systems for having deep traditionalist and orientalist roots.⁶⁸ Recently, Hajnal's well-known European Marriage Pattern, with its demarcation line running from Trieste to Saint Petersburg, has been dubbed a 'still-born typology which will no doubt stand out as the greatest contribution of the Cold War to anthropology'.⁶⁹

Despite being hotly debated, research into family systems will remain on the agenda for the foreseeable future. However, many things are still unclear. First, it proves difficult to define the essential characteristics of family systems – co-residence patterns, inheritance rule or kin ties – let alone to come up with good historical indicators. Second, and understandably, the origins of family systems are sought in different directions. Some scholars focus on the impact of the Black Death on women's labour participation to explain late marriage in Europe,⁷⁰ whilst others put more emphasis on the early medieval spread of Roman Catholicism and the manorial system.⁷¹ Some even go back to the Bronze Age to explain global variation in family types.⁷² Finally, we need to know how it is possible that ancient regional differences in family types can still exert influence on current social relations and economic performance. Different pathways are conceivable. First, as the family is the locus of primary socialisation, we can imagine that (implicit) norms regarding intra-familial relations, ideas of the relative value of boys and girls, obligations towards family, etc., are passed on from one generation to the next. Second, traditional rules – even when now extinct – for co-residence and inheritance have shaped the networks of extended kin that operate as support systems or 'communicating communities' and still influence couples' decision making. Indeed, the size and quality of the internal relationships of such networks differ strongly across Europe⁷³, as well as within countries, which has been demonstrated

67 Steven Ruggles, 'Reconsidering the Northwest European Family System', *PDR* 35 (2009) 249-273.

68 E.g. Mikolaj Szoltysek, The genealogy of Eastern European difference: an insider's view. MPIDR Working Paper 2011-014.

69 Emmanuel Todd, *L'origine des systèmes familiaux*, Vol. 1 (*L'Eurasie*), (Paris 2011) 48.

70 Tine de Moor and Jan Luiten van Zanden, 'Girl power: the European marriage pattern and labour markets in the North Sea region in the late medieval and early modern period', *The Economic History Review* 63 (2010) 1-33.

71 Michael Mitterauer, *Why Europe? The medieval origins of its special path* (Chicago 2010).

72 Todd, *L'origine des systèmes familiaux*.

73 See, Patrick Heady and Martin Kohli (eds.), *Family, kinship and state in contemporary Europe*. Vol.3 *Perspectives on theory and practice* (Frankfurt/New York 2010).

for the Netherlands.⁷⁴ Lastly, and as already mentioned, family systems in the past may have stimulated the emergence (or lack thereof) of other social or political institutions that have shaped the developmental path of a particular region up to the present day.

Epilogue

In the above sections, I have discussed topics within historical demography, currently of interest to its practitioners in the Netherlands and Belgium (although I have concentrated on Flanders). Apart from an ongoing interest in the demographic transition, I have observed new explorations of individual demographic variability, using methods including looking at mechanisms of intergenerational transmission. Further, there is a renewed interest in the 'institutional' characteristics of the family and the way in which family norms and patterns have affected economic developments in the long term.

In this epilogue, I would like to take an overview of the field and answer the question of what historical demography in or of the Low Countries brings to the world at large. In my opinion, the Low Countries have three things to offer. First, the *demographic histories* of our countries, being densely populated, urbanised, commercialised, and with a strong emphasis on nuclear families, provide a specific perspective to the debates about when and how fertility declined and when and how specific diseases lost their grip on children and adults. In addition, the contrast between early (in Belgium) and late (in the Netherlands) industrialisation is of interest with regard to the ongoing discussions about how societal 'modernisation' affected geographic mobility, careers, partner choice, the timing of marriage and opting for a smaller family size. The Netherlands, in addition, stands out in terms of religious diversity and competition, offering insights into the interplay between religion, social control and demography.⁷⁵

Second, the Low Countries stand out due to exceptionally *rich and accessible sources*. The population registers (started in Belgium in 1846 and

74 Hilde Bras and Theo van Tilburg, 'Kinship and social networks. A regional analysis of sibling relations in twentieth-century Netherlands', *Journal of Family History* 32 (2007) 296-322.

75 For a more extensive discussion of the specific Low Countries perspective to demography, see Koen Matthijs, Jan Kok, Theo Engelen, Frans van Poppel and Kees Mandemakers, 'A turn of fate. Life courses in the Low Countries between 1850 and 1940'. Working Paper WOG/HD/2006, <http://soc.kuleuven.be/ceso/historischedemografie/resources/pdf/WOG%20working%20paper01.pdf>

in The Netherlands in 1850) are a virtual gold mine. These registers offer the possibility to trace individual people from one demographic event (for instance migration) to the next (for instance marriage), and to determine the causes and consequences of behavioural choices. Not surprisingly, the innovative use of life courses and ‘event history analysis’ to shed new light on demographic processes was pioneered with the use of Belgian data.⁷⁶ The Historical Sample of the Netherlands became one of the leading historical databases in the world, precisely by exploiting the research potential of the population registers. In both countries, other sources are being opened up for scholarly research. For instance, Dutch census records have been made available on the Internet⁷⁷ and they are currently the subject of a project to use semantic web technology to enhance their usability even further.⁷⁸ Dutch records on birth, death and marriage will soon be linked using clever algorithms allowing automatic family reconstitutions.⁷⁹ In Belgium, the civil records of entire provinces are being digitised in crowd-sourcing projects.⁸⁰ Further, municipal information on the economy and population is being provided on the web, including Geographic Information Systems applications to visualise spatial variation.⁸¹ These are just a few examples from a host of initiatives that put historical demography at the forefront of the digital humanities and e-research.

Third, Low Countries’ historical demographers are exemplary in their exceptionally *strong interdisciplinary co-operation*. The (Leuven-based) Scientific Research Network Historical Demography brings together sociologists, demographers, historians and bio-statisticians in Belgium and the Netherlands, resulting in the sharing of data, working on joint publications, exploring new methods and training new generations of practitioners.⁸²

There may be a downside to all this. Focusing on the richest (nineteenth and early twentieth century) sources and the smartest ways to explore them may divert attention from earlier periods and from qualitative sources. However, I am confident that the balance will be restored, and that the gains made in the past decade – in terms of data, skills, interdisciplinary networks and international outreach – will be consolidated.

76 George Alter, *Family and the female life course. The women of Verviers, Belgium, 1849-1880* (Madison 1988).

77 <http://www.volkstellingen.nl/nl/>.

78 <http://www.cedar-project.nl>

79 <http://www.iisg.nl/hsn/news/links-project.php>

80 E.g. <http://www.familiekunde-brussel.be/>

81 <http://www.hisstat.be/>.

82 <http://soc.kuleuven.be/ceso/historischedemografie/eng/index.html>.

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