Societal openness during the urban crisis

Partner selection in 19th century Belgian textile cities
Ghent and Verviers

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Working paper of the
Scientific Research Community Historical Demography

WOG/HD/2006-4

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D/2006/1192/5

SOCIETAL OPENNESS DURING THE URBAN CRISIS

PARTNER SELECTION IN 19TH CENTURY BELGIAN TEXTILE CITIES GHENT AND Verviers

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Abstract

In this paper we examine the partner selection of the lower classes during an urban crisis period in early industrial Belgian cities. We found that in this period characterized by an economic transition, overpopulation, migration and a low standard-of-living, social heterogamy was high, while social homogamy increased, or was 'restored', in the subsequent period. The urban crisis-effect on partner selection contradicts the claims of modernization theory that there was a gradual increase of societal openness and that societal openness was typically modern, but it fits the idea of the informalization of marriage, a process marked by an increase of unmarried cohabitation and illegitimacy.

In this paper we address the formation of social bonds between individuals with a different social origin under societal conditions that are described as an 'urban crisis'. Group formation can be used to study the 'openness' of a society, defined as the extent to which ascribed positions, such as one's social origin (the class of one's father), have an influence on the life of individuals.¹ We use marriage partner selection according to social origin as an indicator of societal openness (Blau et al., 1984; Thompson, 1988; Uunk, 1996; Beekink et al., 1998; van Leeuwen & Maas, 2002; Van de Putte, 2005). We distinguish between social homogamy, defined as marrying a partner with the same social origin, and heterogamy, defined as marrying a partner with a different social origin.

The research on partner selection is closely connected to the research on (intergenerational) social mobility, and it is from this field that the main theoretical perspective on societal openness stems. The 'classic' view, inspired by modernization theory and particularly the 'thesis of industrialism', holds that there was a gradual increase of social mobility in the course of the industrialization process (see Fukumoto & Grusky, 1993; Miles, 1999; van Leeuwen, Maas & Miles 1996). The closed traditional society characterized by high levels of immobility and homogamy became a modern open society characterized by high levels of mobility and heterogamy. Yet, both research on social mobility and on homogamy did not produce systematic empirical evidence for this view (for an overview see van Leeuwen & Maas, 1996; van Leeuwen, Maas & Miles 2005; Miles 1999, Van de Putte 2005). One of the reasons for this lack of empirical evidence is the influence of the specific historical socio-economic context on the partner selection pattern.² As the partner selection process is complicated, being influenced by factors such as feelings of group belonging, personal preferences for specific partners, social control and the characteristics of the marriage market, there are many ways in which this socio-economic context can exert an influence.

In this paper we address a specific aspect of this problem by examining partner selection during an urban crisis. By this concept we refer to societal conditions characterized by an economic transition, a declining or low standard-of-living, overpopulation and migration (Wagenaar, 1992; Seccombe, 1993). We claim that under these conditions, even in early-industrial societies, the impact of social origin on group formation decreased. This led, in our view, to a temporary high level of heterogamy. This pattern does not fit the standard modernization view, as it

¹ Ascribed positions, like sex, age, geographical and social origin, are assigned to an individual beyond his or her effort, and are the opposite of achieved positions. This is a central distinction in the sociology of modernization (Ritzer, 1992).

² The standard modernization thesis might of course also be wrong (Beck, 1992). Another factor is the lack of a common scheme for the classification of occupational titles (Van de Putte & Miles 2005; Maas and van Leeuwen 2005).

implies that societal openness is not typically modern, nor that there was a gradual increase of societal openness.

In short, in this paper we aim to include the historical context explicitly in the research on the influence of modernization on group formation and to demonstrate that incorporating the historical socio-economic context may help to understand the complex patterns of societal openness. For that purpose we examine the partner selection pattern in two Belgian textile cities that experienced an urban crisis in the first half of the 19th century, namely Ghent and Verviers. In section 2.2 we give a detailed description of the precarious living conditions in these cities during the urban crisis. In section 3 we perform an empirical analysis of social homogamy, using marriage certificates. We start by discussing how precisely the urban crisis influenced homogamy.

Partner selection in the urban crisis

In this section we first discuss a simple model of partner selection to organize the discussion. Second, we define the traditional system of homogamy. We continue by explaining how this system came under pressure during the urban crisis and how homogamy was restored afterwards.

Determinants of partner selection, the traditional system of homogamy

There are three groups of determinants of partner selection (Kalmijn, 1998; see also van Poppel et al., 2001; van Leeuwen & Maas, 2001; Van de Putte, 2005). First, there are 'structural causes'. Partner selection is influenced by the supply of potential partners. This supply can be defined as the composition of the group of marriage candidates by social origin and is, ultimately, the product of the *social structure*, that is, the number of skilled, semi-skilled and unskilled workers etc. The supply of potential partners is also determined by *meeting opportunities*. If, for example because of spatial segregation, marriage candidates can more easily meet similars, homogamy is stimulated.

Second, individual evaluation criteria ('preferences') are applied on partner selection. There are three main principles of evaluation that inform the 'development' of preference patterns in partner selection. *Rational-instrumental* selection is present when one chooses the most suitable partner. This principle may be applied on the social origin or on the social position of a potential partner. The former will lead to homogamy according to social origin, that is, in case everybody tries to prevent to marry a lower ranked partner, the latter to heterogamy. *Romantic-expressive* selection occurs when one chooses the only 'true' partner. If this principle is applied, the marriage is less likely to be homogamous (Shorter, 1975). Finally, selection may be based on '*group belonging*'. Prejudices towards outsiders are important causes of homogamy. If, for example, social groups are defined by the father's occupation, marriage partner selection is probably restricted to this in-group.

A third determinant is 'social control'. The choice for a specific partner is typically influenced by the preferences of third parties, such as parents, peers, priests and colleagues.

To understand how the urban crisis had an impact on partner selection, we first discuss partner selection in traditional society. Pre-industrial societies are usually considered to be closed social systems with strong homogamy according to social origin (van Leeuwen & Maas, 2002). We can specify this system of homogamy in terms of the partner selection model (table 1). First, in traditional society, occupational identity was important as an organizing principle of social life,

as a shaper of social contacts between families attached to the same occupational group (Verhavert, 1940; Beauvalet-Boutouyrie, 1999; Miles, 1999; Pittomvils, 1994-1995). This stimulated homogamy because of its evident impact on group belonging (Van de Putte et al., 2005). Second, partner selection was typically used as a rational-instrumental tool for social mobility (e.g. Dribe & Lundh, 2005), and as long as the father's position was crucial in the transmittance of property or skill, homogamy according to social origin was the result. Third, also the typical tight social control led to homogamy by social origin, as it prevented marriage candidates to marry the 'wrong' partner (Dribe & Lundh, 2005; van Leeuwen & Maas, 2005).

Needless to say that this is only a general account of partner selection in traditional society, without regard of the many differences that probably existed. Particularly the difference between urban and rural areas was quite considerable, with cities typically showing a higher level of heterogamy (Miles 1999). But also rural society was not necessarily completely closed. Social control was not perfect, and intergenerational social mobility was far from absent, and therefore heterogamy was, of course, far from exceptional (Van de Putte et al., 2005).

Table 1. Overview of determinants of partner selection

Determinants	Traditional society	Urban crisis	Modern society
Structural ³	/	/	/
Preferences			
Rational-instrumental	Social <i>origin</i>	Social <i>position</i>	Social <i>position</i>
Romantic	No	No	Yes
Group belonging	Strong	Weak	Weak
Social control	Strong	Weak	Weak
Partner selection pattern	Homogamy	Heterogamy, but temporary	Heterogamy

The effect of the urban crisis on partner selection

The urban crisis showed the effects of modernization before it became regulated, that is, before the development of the strong (municipal) government, the large-scaled educational system, the welfare state and the modern labor movement, at, say, the end of the 19th century. In our view, the urban crisis undermined the system of homogamy. There are four specific reasons for this (table 1).

First, *the urban crisis diminished the paternal capacity to interfere in his children's lives*. The economic transition itself weakened the position of the father due to the loss of property and means of production, unemployment and the declining role in transmitting skill (Seccombe, 1993: 59). Also migration may have contributed to this. Due to migration, the parents of the marriage candidates often lived elsewhere, what seriously diminished their capacity to support their children. And even if they were present, children often lacked their support, as these parents did not necessarily dispose of strong networks of friends and family in their new place of residence (Ryczkowska, 2003). Consequently, the potential partner's value was probably no longer estimated by his or her social origin, and rational-instrumental selection was no longer applied on it.

³ The influence of social structure is context-dependent. We will control for its influence in the empirical analysis. The role of meeting opportunities is difficult to assess, we do not make claims about it, but see methodology section.

Second, also the *identification with the father's occupation* probably weakened. In a discussion of 19th century Marseille Sewell claimed that French immigrants were more socially mobile than natives. These immigrants left the 'familial web of social relations', and this diminished their commitment to and identification with the paternal occupation (Sewell, 1976). Social conditions of economic change, population growth and low or declining standard-of-living may provoke similar pressures on feelings of group belonging, and not only for migrants. Old-style affiliations may seem to be irrelevant in the new, chaotic reality. In this way, the urban crisis may have diminished the impact of the traditional occupational group belonging.

Third, the urban crisis probably stimulated *short term strategies*, and this must have had an impact on the way instrumental partner selection was exercised. For children, one's social origin was, in general, typically a long-run determinant of health and wealth once a given age was reached. Social origin refers to both power and prestige. We assume that at the time of marriage, the impact of the social power of the father was indirect and not necessarily very strong, at least for the lower classes. At that time, the majority of men (and women) had finished education and had already entered the labor market. After these key transitions, only few possibilities to influence their children's lives were left (Miles, 1999: 160-179; Goldthorpe et al., 1980; Van de Putte, 2005). We also assume that the transmittance of prestige only offered advantages in the (far) future, as its effect on life chances is as such rather diffuse and indirect (Van de Putte & Miles, 2005). In short, someone's social origin did not offer much help for short term survival. In times of necessity, other strategies, such as selection based on the groom's and the bride's characteristics may have been more valuable to cope with the precarious living conditions during the urban crisis, as this offered direct advantage. The focus on daily survival is clearly present in Dhondt's account of early nineteenth century factory workers (1960: 40): "their life was has hard and miserable and they had not much attention for anything except for the next day. From time to time, driven by despair, they showed insurgency" (own translation from Dutch).

Fourth, it is in the urban crisis conditions *difficult* for the parents and the marriage candidates to *evaluate* (the parents of) *the potential partner* (Wall, 1999). A main cause of this was the increased geographical mobility in the city, a typical phenomenon in times of strong population growth and housing shortage. Because geographical mobility reduced the possibility to gather information, the efficiency of social control strategies was limited and therefore it undermined the system of homogamy (Van de Putte, 2005). This factor was probably less strong for those persons most 'rooted' in society, that is, for those persons that used family, work or ethnic relationships to build stable and strong social networks in native city life.⁴

In short, we claim that because of the diminished importance of social origin, the decreased identification with one's social origin, the focus on short term strategies and the weakening of social control, the urban crisis stimulated social heterogamy. We expect this to have been the case for the lower classes in particular, as they experienced the consequences of the urban crisis most severely.

In our view, these conditions did only have a *temporary* effect. Homogamy regained its strength in the second half of the nineteenth century, as the urban crisis was followed by a period of stability in which societal conditions were beneficial for the restoration of the paternal position.

⁴ In many 18th and 19th century cities (e.g. Grenoble, Geneva) a distinction is made between the rooted persons, who are seen as the 'core' of the city, those who own and transmit the local town culture and the city pride, and the mobile persons, who are just going through. Migrants meant that marrying a native bride was seen as a good strategy of stabilization and integration in the city.

First, the declining importance of social origin was mainly linked to the urban crisis, that is, to the low standard-of-living, migration, overpopulation and economic transition, and not only to proletarianization and industrialization as such. Consequently, when the pace of economic transition slowed, population growth declined and the standard-of-living rose, also the effects on partner selection probably disappeared.

Second, in the second half of the 19th century the activities of both the labor movement and the Church attempted to restore the father's social position. Even if later in the 19th century the modern labor movement aimed at broadening group boundaries by unifying all workers in one party and in one lower class (transcending more narrow boundaries based on occupation or skill), occupation based social life and identity remained the basis of its activities for a long period. Indeed, the organization of the labor movement was originally based upon those segmentations (De Witte 1986). In both cities, also in a more modern context the process of early political class formation with the many federations and cooperatives shaped social life and served as a means of structuring social bonds, of producing a social identity (being a spinner or textile worker), of claiming dignity in a new environment of stagnation (Verviers) or in a less chaotic environment (Ghent) (see also section 2.2 on context information). This may more or less work in the same way like traditional occupation based social life promoted social immobility (Sewell, 1976). It is plausible that these were the elements that led to the restoration of homogamy.⁵

Furthermore, strategies of the Church and the bourgeoisie tried to restore patriarchal power in the lower class family, especially later in the 19th century (Van de Putte, 2005; Seccombe, 1993; Servais, 2001; De Maeyer, 2000). Also this may have helped to restore respect for the father and his social position.

Hypothesis and empirical implications

The central hypothesis of this research is that the urban crisis led to societal openness. If there is an urban crisis-effect in Ghent and Verviers, we expect to observe a low level of homogamy in the first half of the 19th century and a higher level of homogamy thereafter. As we claim that the urban crisis-effect was caused by changed preferences and/or social control, and not by changes in the social structure, we expect to observe a low level of homogamy after controlling for the supply-effects. We address this first question using log-linear analysis (section 3.1).

Second, if we do observe a temporary low level of homogamy, the next question is whether we can connect it to the reasons underlying the urban crisis-effect. We address this in the second part of the empirical research, using a logistic regression analysis (section 3.2), even though it is not possible to measure all necessary variables at the individual level. If the reasons underlying the urban crisis-effect are correct, we have to observe a relation between social heterogamy and a set of variables that measure different aspects of the urban crisis. We propose three specific empirical claims: 1) if the urban crisis diminished the father's capacity to interfere in his

⁵ It is important to distinguish this period of early political class formation from the subsequent period (1891-1913). A new political climate, in which political class formation and the 'social question' were central issues, swept over Belgium. The socio-political atmosphere was troubled since the strikes of the mid eighties, sometimes framed as a "violent workers' revolt" (Lamberts, 1999: 332). The advent of universal (plural) manhood suffrage (1893) and the entry of the socialist party into parliament served to exacerbate this atmosphere. In this climate of massive working-class discontent, labor movement became a mass movement. In our view, at that time, the process of class formation led to new group belonging criteria (weaker boundaries within the lower classes) and this led (again) to heterogamy, at least in Flanders, what was indeed observed in Ghent (Van de Putte, 2005).

children's lives, we expect that heterogamy was related to the presence of the father; 2) if the urban crisis weakened the identification with one's social origin, we expect that heterogamy was related to the strength of the occupational identity of the grooms; 3) if the urban crisis diminished the possibility to exercise social control, we expect that heterogamy was related to the strength of the bonds of grooms and brides with native city life.

Mind that this third claim includes three variables: the presence of family, work and ethnic bonds, and that two of these (family and work bonds) are also included in respectively the first and second claim. However, the third claim differs from the other claims in the way the relation with the urban crisis is specified. Indeed, the relation between these variables and heterogamy can take two forms. First, every variable may have a direct effect, as their relation with social heterogamy may be 'universal' (e.g. the presence of the father may always stimulate homogamy). In that case, the urban crisis-effect was caused by the increasing number of persons that were 'vulnerable' to heterogamy (e.g. during the urban crisis there were more spouses whose father was not present). Second, the relation may be conditional upon the existence of the urban crisis. This means that the relation was only present during the urban crisis (e.g. the effect of the absence of family in the city of marriage may only be present during the urban crisis). If these interaction-effects are observed, this suggests that during the urban crisis family, ethnic and work relationships were used as a strategy of social control to prevent heterogamy (third claim).

Data and methodology

Data

We use marriage certificates from Civil Registration registers. The certificates contain information on the marriage itself, some demographic history of the spouses and their parents, their occupation, place of residence and birth, etc. For Ghent, one in twelve marriage certificates were coded, for Verviers an alphabetical sample on the letter B. We only use marriages for which both parents were alive. For Ghent we have 1347 of these marriages for the period 1800-1890, for Verviers we have 597 marriages for the period 1819-1890.⁶

Marriage certificates are the main source of information for historical marital mobility research (Maas & van Leeuwen, 2005). One major issue of concern is, however, the classification of the occupational titles present in the certificates. In order to present a controllable, theoretically grounded and explicit classification of these numerous occupations into a limited number of classes, we applied the SOCPO-scheme (presented in detail in Van de Putte & Miles 2005, 2006). This classification distinguishes between five 'social power' (or SP-) levels using skill, possession, position within a hierarchical organizational structure and prestige characteristics as criteria. Lower class subgroups are: SP-level 1 (mainly unskilled workers), SP-level 2 (mainly semi-skilled workers) and SP-level 3 (mainly skilled workers). The middle class (SP-level 4) is mainly composed by master artisans, retailers, farmers, clerks etc. SP-level 5 (the 'elite') comprises white collar/professional specialists (e.g. lawyers), wholesale dealers, factory owners, etc.⁷

⁶ Information on the period before 1800 is difficult to collect as it was only after 1796 that government created marriage certificates. In parish certificates, only few occupational titles are recorded.

⁷ As a preparatory step we applied the HISCO-scheme (van Leeuwen et al., 2002). HISCO is a functional classification distinguishing between occupations on the basis of the tasks associated with them. Each occupational group gets a five-digit code (e.g. 75400 for 'weaver'). Other information, e.g. on employment status, is stored in separate codes.

The urban crisis in Ghent and Verviers

Both Ghent and Verviers underwent an urban crisis in the first half of the 19th century. The first component of the urban crisis is the economic transition. There was a genuine industrial take-off in Ghent (Mokyr, 1976) and Verviers. In Verviers, steam engines' capacity increased from fourteen horse power in 1816 to 546 in 1857 and 747 in 1860 (Desama & Bauwens, 1995: 91; Desama, 1985: 67). The net production of woollen cloth grew from 22.000 pieces in 1784 to 65.000 pieces in 1848 (Desama, 1985: 73). The number of textile workers in Verviers grew in absolute number from 3858 in 1806 to 5306 in 1845 (Lebrun, 1981: 228-235). In Ghent, first steam engines were used around 1800. In 1850 the cotton industry made use of a steam engine capacity of 1070 horsepower (Coppejans-Desmedt, 1986: 583). In 1860 the cotton spinning industry counted about 500.000 spindles. At the same time the flax industry counted about 120.000 spindles (Capiteyn, 1983). In 1846 there were more than 10.000 workers in the textile sector (Capiteyn, 1983).

Although both cities were large textile centers, there were also many differences. First, the cloth manufacture in Verviers was less sensible to economic fluctuations than the Ghent cotton industry. In Verviers, the textile industry had developed from a pre-industrial tradition of cloth manufacturers. The Ghent industry lacked such an experience, what proved to be a disadvantage to cope with the rather chaotic early-industrial environment (Lebrun et al., 1981: 185).

Table 2. Social position of the father of the groom, Ghent and Verviers, percentages by period

Verviers	1800-1850	1851-1873	1874-90
SP-level 5 (elite)	7.14	9.00	9.47
SP-level 4 (middle class)	12.24	16.11	18.95
SP-level 3 (mainly skilled workers)	17.35	18.48	27.37
SP-level 2 (mainly semi-skilled workers)	48.47	40.76	33.16
SP-level 1 (mainly unskilled workers)	13.27	13.74	10.53
N	196	211	190
Ghent			
SP-level 5 (elite)	8.5	6.2	5.9
SP-level 4 (middle class)	24.3	24.4	23.8
SP-level 3 (mainly skilled workers)	32.6	34.1	31.5
SP-level 2 (mainly semi-skilled workers)	18.4	13.1	19.2
SP-level 1 (mainly unskilled workers)	16.2	22.3	19.5
N	445	295	390

A second, major difference is that the Ghent economy was more diverse. Although the textile sector was by far the most important, also other large sectors were present, as is illustrated by the large number of metal and machinery workers, shoemakers, construction workers and tailors. The Ghent economy also employed a large middle class (table 2). In Verviers, the textile industry dominated the social structure. In 1800-1850 about 45% of the fathers of the grooms had an occupational title that explicitly referred to the textile industry (Lebrun, 1981; Desama, 1985), hence the large size of SP-level 2, in which most of the textile occupations are coded. This is partly related to the recruitment of workers among sons of rural textile workers living close to the city. While in Ghent about 80% of the grooms working in the textile sector were native, in Verviers only about 50% were. Yet, also about 40% of the Verviers grooms worked in the textile

sector. In Ghent, only about 9% of the fathers had an occupational title that refers to the textile sector⁸, while 12% of the grooms had.

A second aspect of the urban crisis concerns population growth. In Ghent, population doubled in the first half of the 19th century, from 50.000 to 100.000 inhabitants. In Verviers population grew by about factor 2,4 (from 10.000 to 24.000 inhabitants, Desama, 1984 and 1994). This population growth went together with housing problems. In Ghent, the number of inhabitants per hectare was about 464 in 1848. This gradually decreased, reaching 265 in 1913 (Capiteyn et al., 1983). The city was unable to cope with the problem of overpopulation, as was shown by the large number of slums (Backs, 2001). In the middle of the century about 20% of the population lived in these miserable slums (Decavele et al., 1980). As the first factories were built in the city center, the inner city was an overpopulated mix of slums and factories (Capiteyn et al., 1983). Only in the second half of the 19th century, after some severe cholera- and typhus crises (Capiteyn et al., 1983), some first steps were made to improve this situation (Steensels, 1977; Coppejans-Desmedt 1986). In Verviers there was a similar situation. Also in this city companies were set up in the very center of the city, what resulted in an “inextricable jumble of factories, fine large houses and miserable housing” (Desama & Bauwens, 1995; own translation from French). With an average of 11,85 people per house (in 1846) the ratio of the number of inhabitants to the number of inhabited houses was the highest of the whole Liège province, for which the average was only 5,17 (Oris, 1990).⁹ In Ghent this ratio was about 7,2 in 1843, but to compare this with Verviers we must take the larger middle class of Ghent into consideration, which undoubtedly experienced a better housing situation.

A third component is migration. The proportion of migrants among grooms was rather stable in 19th century Ghent, although a bit decreasing. In the first half of the 19th century 43% of the grooms were migrants, while this percentage was 40,9% in the period 1874-1890. In Verviers, the proportion migrants increased from 55,2 to 62,2% in the same periods.¹⁰ The composition by class changed somewhat during the 19th century. In Ghent, the proportion of the lower class among the migrants decreased from 73 in the first half of the 19th century to 67% in the period 1873-1890. In Verviers, this proportion decreased from 86,7 to 77,0% in the same periods.

Even while the share of migrants in the city population was higher than in non-industrial Belgian cities in the first half of the 19th century (Van de Putte et al., 2005), it was not typically high in the urban crisis period. Important however, the *combination* of the presence of a large group of lower class migrants and the economic transition, the low standard-of-living and overpopulation may have had effects on partner selection that were typical for this period.

⁸ Yet, there were more ‘laborers’ and ‘factory workers’ in Ghent, and they probably worked in textile factories. This reflects the different origin of the workers. While Ghent recruited unskilled workers among its Lumpenproletariat, Verviers attracted proto-industrial textile workers coming from the neighboring countryside and the suburbs.

⁹ Yet, this “pole position” of Verviers does not seem to be the obvious answer to population growth, since – though really important – it has never reached the levels and the rhythm observed in other Walloon industrial areas, such as Liège or Seraing. Of course, the other industrial centers were also overpopulated, but the overcrowding was by no mean equal to that observed in Verviers. The specificity of the wool city may be explained by the bad railway connections. The railway only reached the city in 1843, and really had good connections with the neighboring villages were only present since the 1870’s. In these circumstances, workers had no other choice than living near their factory.

¹⁰ These are of course no migration figures. First, unmarried cohabitation is not taken into account, although probably strong for migrants and in the first half of the 19th century (Van de Putte, 2005). Second, natives and migrants may differ in marriage intensity. Third, there may be a time lag between arrival and marriage.

The fourth component is the low standard-of-living. Research of Scholliers (1995), Vandenbroeke (1973) and Segers (2003) clearly demonstrates the low standard-of-living in Ghent in the first half of the 19th century, particularly between 1830 and 1850. Afterwards there was a gradual increase. In Verviers, real wages did almost not increase between 1810 and 1850 (less than 10 percent). According to the budgets elaborated by Ducpetiaux in 1855, most of the Verviers workers could not make their family living without the help of the charity institutions. When food prices increased, for instance in 1846 or 1853, extraordinary helps were organized (Desama & Bauwens, 1995: 103).

Stabilization after 1850

In the second half of the 19th century, in both Verviers and Ghent the economic transition slowed and early political class formation started.

First, we discuss the economic evolution. In Verviers the period 1850-1873 was one of economic growth, but because of productivity gains (Desama & Bauwens, 1995) this industrial success had only a limited demographic echo as far as massive migrations were concerned (Lebrun et al., 1981). After 1873 Verviers' industry declined more precociously than elsewhere. Weaving and spinning installations were not sufficiently renewed and improved during the ascending Kondratieff of 1850-1873. Consequently, at the exit of the depression around 1890, the Verviers textile industry was no more competitive, reduced its labor force and the population started to decline immediately. In fact, the city never succeeded to really stop this decline. From 20th century texts and testimonies it is clear that the city tended to close on itself, was associated with the textile, conscious of its decline and unable to react. In other words, the precocious industrial decline was associated with a general atmosphere of resignation. Yet, the standard-of-living rose pretty well (Leboutte, 1988).

The economic situation in Ghent showed similarities but was also somewhat different. Although the largest expansion happened in the first half of the 19th century, there still was expansion after 1850. The number of textile enterprises and workers increased, but their proportion within the whole economy declined (Capiteyn et al., 1983). In the same period, the population growth slowed and the standard-of-living increased gradually.

Second, there was a process of early political class formation. Both Verviers and Ghent were pioneer cities of the labor movement. In Verviers this resulted in many trade unions, federations, cooperatives, an affiliation to the Belgian Worker Party in 1885 and, yet only in a later phase, massive strikes. Also in Ghent labor movement became important. In the large industrial sectors gradually cohesive group bonds emerged. In the late fifties important branches of the labor movement were established (organizations of spinners, weavers etc.). This early class formation did however not succeed in overcoming sector based differences at an early stage (De Witte, 1986: 50; De Wilde, 1997: 200; Van de Putte, 2005).

Variables

Before we discuss the methodology of the empirical analysis, we give an overview of the variables that will be used.

Period

We distinguish three periods: 1800-1850, 1851-1873 and 1874-1890. These periods broadly reflect the main structural socio-economic transformations: the first industrial revolution and the urban crisis before 1850, an ascending phase from 1851 to 1873 and the long depression in industry and agriculture after 1874.

Urban crisis variables

We measure the possibility to interfere in one's children's lives by combining migration status and the presence of the father in the city of marriage into one variable.

- 'migration and the presence of the father of groom/bride'
 - groom/bride is native¹¹
 - groom/bride is migrant and father groom/bride lives in the city of marriage
 - groom/bride is migrant and father groom/bride does not live in the city of marriage

We measure 'occupational identity' by comparing the occupation of father and groom.¹² We assume that for sons who worked in a different sector the identification with the father's occupational group was less strong. We control for social mobility, as those who worked in a different sector were also more likely to be mobile. We make a distinction, within the category of grooms that have a different occupation than their father, between those sons who were mobile (had a different SP-level than their father) and those who were not.

- 'occupational identity'
 - son had same occupation, and same SP-level as father
 - son had different occupation, and same SP-level as father
 - son had different occupation, and different SP-level as father¹³

We measure the rootedness of the spouses by the presence of social networks. Apart from the bonds with the occupational group of the father and with the father (previous variables) we also measure the bonds with family members and with native city inhabitants. The first is measured by the presence of family witnesses at the wedding ceremony. Yet, these family connections did not necessarily surpass the own circle, that is, migrants may have had a well-developed network of family members, while remaining quite segregated from native city life (Van de Putte, 2005).

- 'family witness'
 - 0 or 1 family witness (on four witnesses)
 - 2 or 3 family witnesses
 - 4 family witnesses

The second variable is the composition of the couple according to geographical origin. We distinguish between the most rooted couples (natives marrying natives), the least rooted (migrants marrying migrants) and a middle group of mixed couples (Van de Putte et al., 2005).¹⁴

- 'geographical homogamy'
 - groom and bride are native homogamous
 - groom and bride have different geographical background
 - groom and bride are migrant homogamous

¹¹ We cannot distinguish between those with and without father present, as the latter category is too small.

¹² To compare father and son we used the Hisco-codes in the two-digit form (e.g. 95 = construction worker).

¹³ The small number of sons with the same occupation but with a different SP-level is coded in the last category. This situation may occur in case there is information on employment or hierarchal status, as in this case other SP-levels are assigned (e.g. 'master carpenter' and 'carpenter' are coded in the same occupational group, but in different SP-levels).

¹⁴ The mixed group is probably more integrated than the least rooted group. For example, a migrant marrying a native bride in Verviers is someone who wanted to move to the rooted group, and his marriage was already a success, as well as a promise for further integration in the group of real Verviétois.

Control variables

We use a set of variables that measure other determinants of partner selection:

- structural causes

In the first part of the analysis, we use log-linear analysis to control for the main effect of social structure (see section 2.3). In the second part, we include a group size variable.¹⁵ We have no variable for meeting opportunities, yet, there are, in our opinion, no reasons why meeting opportunities might have changed dramatically in the period under observation.¹⁶

- meritocracy

We control for meritocracy by measuring intergenerational social mobility. Social mobility is included in the variable for occupational identity (supra).

- romantic partner selection

We use age homogamy as a measure of romantic partner selection, as Shorter (1975) claims that 'free' partner selection of young spouses resulted in choosing a partner within a close circle of age peers. We distinguish between:

- Older husband marriages (groom is at least two years older than bride)
- Same age marriages (groom and bride do not differ more than two years)
- Older wife marriages (groom is at least two years younger than bride)

Social origin

The variable 'social origin groom' controls whether the evolution of heterogamy was caused by the changing number of grooms who belonged to a class with a specific partner selection profile. For example, if unskilled workers were (traditionally) a marginalized outgroup with a high level of homogamy, the increase of the number of unskilled workers led to an increase of homogamy, even after controlling for structural effects. For the categorizations of social origin, see section 2.1.

Log-linear analysis

First, we perform a log-linear analysis to test whether social homogamy is lower in the urban crisis period than afterwards. We use the log-linear analysis to control for the impact of the social structure on partner selection.¹⁷ The starting point of the analysis is the partner selection table (social origin groom versus social origin bride). Log-linear models specify by what effects, such as the distribution of the social origin of groom and bride (= the social structure) and the association between social origin of groom and bride (= homogamy), the cell frequencies are determined. In this way, log-linear analysis permits to evaluate whether the observed cell frequencies in a partner selection table diverge from the frequencies expected in case of random partner selection. The latter refers to the theoretical reference situation in which there is no

¹⁵ For each category of social origin (e.g. SP-level 2), the percentage of fathers of the bride that belongs to this category is calculated. For each groom with this specific social origin (here: SP-level 2), this percentage is the chance to marry homogamous. The results show whether there are differences in the chance of marrying homogamous between locations and groups, controlling for the group size. For information on this procedure, see Van de Putte, 2005.

¹⁶ And if this changed during the period under observation, this probably only led to an increased difficulty to observe the expected effect of heterogamy in the first half of the 19th century. The slums in Ghent (composed of very small dwellings built around a square or in a small street, without individual sanitation) restricted meeting opportunities between members of different classes, as there were only poor inhabitants. As these slums were already numerous in the first half of the 19th century, this may result in higher levels of *homogamy* rather than heterogamy.

¹⁷ For the use of log-linear analysis in the study of (historical) social mobility see: Grusky & Fukumoto, 1989; Van Leeuwen & Maas, 1996 and 2002.

preference for a specific type of partner and in which the marriage pattern is only determined by the social structure.

A multitude of models can be constructed, each different in the effects it contains and in the way the effects are devised. In this analysis we use two models. *Model 1* estimates the evolution of social heterogamy. It contains four variables: SP-level of the father of the groom, SP-level of the father of the bride, period and location. The model contains parameters for all first order effects, for the association between the SP-levels of both fathers with period, between the SP-level of both fathers with location, and between period and location (second order effects). In this way we control for the effect of the social structure, its changes over time and its differences in each location.

To model the association between the social origin of groom and bride we use a topological design. In topological models, the relation between variables is modeled in a parsimonious way. Each combination of the social origin of groom and bride is assigned to an index. Each of these indices stands for one log-linear parameter. The combinations assigned to the same index are constrained to get the same parameter.¹⁸ This technique is frequently applied in social mobility research (Erikson & Goldthorpe, 1993; van Leeuwen & Maas, 2002). A frequently used type of topological model is the inheritance (or homogamy) model.¹⁹ The model permits to measure the tendency to marry within one's own SP-level (van Leeuwen & Maas, 2002). In this analysis we use a differentiated homogamy model, what simply signifies that not all diagonal cells are assigned to the same index. The model specifies three indices: one for homogamous marriages of the lower classes, one for homogamous marriages of the middle class and the elite and one for the other marriages. We use the last category as the reference group, hence two parameters are estimated. The design matrices of the model:

D1: lower class

```
0 0 0 0 0
0 0 0 0 0
0 0 1 0 0
0 0 0 1 0
0 0 0 0 1
```

row = social position father groom (SP level 5 to 1)

column = social position father groom (SP level 5 to 1)

1 = homogamous marriages of SP-level 1, 2 and 3

0 = other marriages

D2: middle class and elite

```
1 0 0 0 0
0 1 0 0 0
0 0 0 0 0
0 0 0 0 0
0 0 0 0 0
```

1 = homogamous marriages of SP-level 4 and 5

0 = other marriages

¹⁸ In a so-called saturated model an individual parameter is calculated for all cells. In topological models, groups of cells are constrained to have the same parameter, assuming that the differences between the cells are negligible.

¹⁹ Homogamy parameters are similar to inheritance parameters in research on intergenerational mobility, that is, parameters that refer to the diagonal cells of mobility tables.

To obtain a homogamy parameter for each period separately, we add period as a grouping variable. This signifies that the parameters of design matrix 1 are calculated for each period separately.

In *model 2* we use a variant of design matrix 1 so that it measures the third order effect of period, SP-level father groom and father bride (for SP-level 1 to 3), with location as a grouping variable. This model calculates the parameters of design matrix 1 for each location separately. This permits to examine the differences between Ghent and Verviers.²⁰

To assess the fit of the models we compare the model expected frequencies²¹ and the observed frequencies. A measure of error (L^2) indicates how strong these cell frequencies differ. The model with the lowest error is however not necessarily the best one.²² The error must be weighed against the parsimony of the model – the lower the number of effects and parameters, the better. The Bic-value summarizes the error and parsimony of the model (van Leeuwen & Maas, 1996). The model with the lowest Bic-value is the best in terms of the included criteria. We will compare the Bic-value of both models to evaluate the difference between Verviers and Ghent.

Logistic regression analysis

As it is difficult to perform log-linear analysis with many variables with many categories²³, we use a logistic regression analysis to examine the causes of the evolution of homogamy. We limit this analysis to grooms whose fathers belong to the lower classes.²⁴ The outcome variable is marrying heterogamous versus marrying homogamous.

We give an overview of the models. *Model 1* is the basic model in which 'location', 'period', 'group size', 'age homogamy' and 'social origin of the groom' are the independent variables. The

²⁰ The models can be described in this way:

Model 1 = {l, p, g, b, pg, pb, lp, lg, lb, lpg, lpb, D1(gb, 1, p), D2(gb, 1)}, where l = location, p = period, g = SP-level father groom, b = SP-level father bride, pg = the association between period and SP-level father groom, ..., lpg = third order effect of location, period and SP-level father groom, ..., D1 = design matrix for the association between SP-level father groom and bride (SP-level 1-3) with 1 parameter (gb) calculated for each period; D2 = design matrix for the association between SP-level father groom and bride (SP-level 4-5) without period as grouping variable.

Model 2 = {l, p, g, b, pg, pb, lp, lg, lb, lpg, lpb, D1(gbp, 3, l), D2(gb, 1)} where D1 = design matrix for the association between SP-level father groom and bride (SP-level 1 to 3) and period, per location, with 1 parameter (gb) for each period, calculated per location.

²¹ The parameter estimates of all the effects in the model allow to calculate the model expected frequencies. If there are other effects, not included in the model, that strongly determine the observed frequencies, the model expected frequencies will be rather different from the observed (true) frequencies.

²² Otherwise the 'saturated model' (containing all effects) would always be the best model, as observed and model expected frequencies are by definition the same in this model. Saturated models are not theory-driven, and hence have the disadvantage that they are very difficult to interpret.

²³ If many cells of the partner selection table have zero or a few observations the estimation of the parameters is biased.

²⁴ If we also include the middle class and the elite, we need to add interaction parameters to the model (e.g. between the presence of parents and social origin). This unnecessarily complicates the analysis. The claims about the effect of the urban crisis are made for the lower classes, not for the middle class and the elite. Taking this perspective of the groom does not limit the procedure for controlling for the effect of group sizes (Van de Putte, 2005). If we take the other perspective (selection of brides with lower class social origin) the results are not different.

model permits to measure the evolution of heterogamy controlling for the non-urban crisis variables.

In model 2A we add variables that measure the effect of some aspects of the urban crisis, namely 'presence of father groom/bride', 'occupational identity' and 'number of family witnesses'. In model 2B, we introduce 'geographical homogamy'.²⁵ Model 2A and B allow to evaluate whether the effect of these variables was universal, and therefore whether the urban crisis-effect was caused by, for example, a low number of grooms whose parents were present or by a low number of grooms with the same occupation as their father.

In model 3A and B we add interaction parameters to model 2A and B for the variables added in model 2A and B. We use these models to examine whether the effect of these variables was limited to the urban crisis period itself.²⁶

Empirical analysis

Log-linear analysis

First, the parameter estimates of model 1 confirm the existence of an urban crisis-effect on partner selection. Social homogamy was lowest in the period 1800-1850 and increased thereafter. For the first half of the 19th century, the association between social origin of groom and bride (homogamy) increases the frequencies of the diagonal cells for the lower classes with a factor that is only 1,3 times higher than the factor by which the off-diagonal cells are increased. This factor is higher for the subsequent periods, namely 1,71 between 1851 and 1873, and 1,86 between 1874 and 1890.²⁷

Second, model 2, that allows the homogamy parameter to vary in both cities, does not really reduce the model error and consequently the Bic-value is not lower (table 3). This means that in both cities the trend in homogamy was basically the same. Figure 1 shows the evolution of the homogamy parameters in Ghent and Verviers using model 2.

That we observe these results for both cities clearly indicate that the urban crisis-effect is not a peculiar characteristic of a specific location. Note that for reasons of limited data availability we

²⁵ We cannot simply use this variable in model 2A as there is an overlap with the variables measuring the presence of the father. The category 'native*native' (geographical homogamy) is a combination of the category 'native' of the variables that measure the presence of father groom and the presence of father bride.

²⁶ A short note on the interpretation of the parameter estimates of the logistic regression analysis. The parameters of a logistic regression analysis show how many times more (if higher than 1) or less (lower than 1) the chance is to marry heterogamous if one belongs to a specific category of a variable compared to the reference category of that variable. In a model containing interaction effects, the main effects of the variables in the interaction effect (e.g. between period and family witnesses) show the effects within the reference group of the other variable in the interaction effect. For example, the parameters for family witness show the difference in the chance to marry heterogamous in the reference period. The period-effect shows the effects for the reference category of 'family witness'. The interaction effects of 'family witness' and period show how this period-effect differs in the other categories of 'family witness'.

²⁷ The difference between 1800-1850 and 1873-1890 is significant at the 0,05-level. Also the difference between the period 1800-1850 and 1851-1890 is statistically significant at the 0,05-level. If we add a grouping variable (period) for elite and the middle class homogamy (D2) to model 1, we observe that homogamy is not lower in the first half of the 19th century for these groups. The urban crisis-effect is, what is of course not surprising, limited to the lower classes.

did not measure the marriage pattern before 1800. Consequently, we can, in principle, not exclude that heterogamy was high even at that time. Yet, we did *not* find a similar pattern of early temporary heterogamy in other Belgian cities (Leuven and Aalst) that did *not* undergo such an urban crisis phase (Van de Putte, 2005), even though we used the same classification scheme and a comparable statistical model.

Table 3. Model information for log-linear analysis of social homogamy, Ghent and Verviers²⁸

Models	Bic	df	L ²
Model 1: urban crisis-effect in Verviers and Ghent	-368	92	318,0
Model 2: different pattern for Verviers and Ghent	-346	89	317,5

Figure 1. The rise of homogamy in Verviers and Ghent, parameters of log-linear model 2

Logistic regression analysis

The results of the logistic regression analysis (model 1, table 4) confirm the presence of the urban crisis-effect, now controlling for group sizes, age homogamy, location and social origin of the groom. Heterogamy was highest in the reference period (1800-1850) and decreased after 1850. Model 1 also shows that SP-level 3 (the skilled) and SP-level 2 (the semi-skilled, although the parameter is not significant) were more heterogamous than SP-level 1 (the unskilled), but this difference between the subgroups of the lower classes was not the cause of the period-effect in heterogamy.

²⁸ The negative Bic-values for both models signify that the models are better in terms of fit and parsimony than the saturated model. This means that omitting more specific effects (e.g. different homogamy indices per SP-level) does not lead to a significant loss of information.

In model 2A and B we add the urban crisis variables. First, the results confirm partly the role of parental presence for heterogamy. Heterogamy is higher if the father of the (migrant) bride was not present. That this was not observed for grooms is maybe not surprising, as brides were probably in general more dependent upon their father's social position (Leneman, 2000) and were therefore, we can assume, likely to be the first to encounter the disadvantages of losing the father's support – although this is an 'a posteriori'-explanation. Second, and perhaps surprising, there was no general effect of occupational identity; at least in case the son did not attain a different position than his father. In case there was social mobility, also heterogamy was likely. Third, there is no effect of 'family witness', but remind that this variable does not measure the number of native family witnesses. Fourth, the least rooted couples (migrants marrying migrants) were more heterogamous than the most rooted couples (natives marrying natives), what confirms the effect of this aspect of the rootedness of people on heterogamy.

Yet, adding all these variables that measure (some of) the causes underlying the urban crisis-effect did not change the period-effect (model 2A and B). Consequently, the urban crisis-effect was not caused by the presence of many migrant brides without father, nor by an increased number of unrooted migrants.

The results for model 3A and B add complexity to the discussion. Important are the results of the control variables. First, the role of the presence of the father of the migrant bride is confirmed. Moreover, the low value of the interaction parameters shows that the period-effect parameters were even lower for these brides in the period 1850-1873 and in the period 1874-1890. This indicates that the urban crisis-effect was stronger for them than for the reference category (although the effect for period 1874-1890 is not significant). Brides whose father was not present were always more heterogamous, and the lack of this bond made them even more heterogamous during the urban crisis.

Second, grooms who had the same social position as their father and worked in the same sector, had, in the urban crisis-period, *less* chance to marry heterogamous than those who worked in a different sector (main effect). This means that the inclusion in the occupational network of their father 'protected' or 'prevented' them against the effect of the urban crisis. The interaction parameters show that the period parameter is much higher for those who worked in the same sector and had the same SP-level, what indicates that the difference in heterogamy over time (the urban crisis-effect) was less strong for them (although for this variable, the interaction parameter for the period 1873-1890 is only significant at the 0,10-level). This signifies that during the urban crisis heterogamy was mainly higher for those who did *not* work in the same sector as their father. Apparently heterogamy was connected to occupational identity. In the social turmoil during the urban crisis only those with a strong occupational identity managed to keep the role of social origin intact, while in later periods, everybody could. This does not simply confirm that a weaker identification with one's father occupational group caused heterogamy. In that case we would expect a non-period bounded effect of occupational identity combined with, during the urban crisis, a low number of sons that worked in the same sector as their father. The observed effect suggests that occupational identity was a strong tool for determining group bonds, and the strength of it became clear in periods in which group bonds were under pressure.²⁹ This shows, in our view, the importance of being rooted in city life.

²⁹ To this must be added that in the period 1874-1890, the effect of working in the same sector as one's father disappeared (parameters obtained by the same model, but with 1873-1890 as the reference period: 1,077; $p = 0,815$), what confirms our interpretation.

Tabel 4. Logistic regression analysis of marrying heterogamous (=1) versus marrying homogamous according to social origin, Ghent and Verviers³⁰

Variables	Model 1		Model 2A		Model 2B		Model 3A		Model 3B	
	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)
Group size	,000	,954	,000	,958	,000	,958	,000	,957	,000	,958
Period										
1800-1850 (ref.)										
1851-1873	,060	,758	,031	,717	,040	,729	,251	,568	,288	,593
1874-1890	,011	,686	,005	,644	,007	,657	,002	,205	,002	,209
Location										
Verviers (ref.)										
Ghent	,602	,929	,951	,991	,909	1,018	,981	1,004	,808	1,039
Age homogamy										
Groom older than bride (ref.)										
Groom and bride equal age	,573	1,082	,660	1,066	,648	1,068	,585	1,084	,614	1,077
Groom younger than bride	,842	,970	,479	,893	,522	,904	,513	,899	,628	,925
Social origin groom										
SP-level 1 (ref.)										
SP-level 2	,085	1,379	,063	1,429	,058	1,440	,068	1,427	,061	1,440
SP-level 3	,010	1,559	,005	1,670	,004	1,691	,005	1,671	,004	1,689
Family witness										
0 or 1 family witnesses (ref.)										
2 or 3 family witnesses			,228	1,215	,235	1,211	,316	1,291	,431	1,218
4 family witnesses			,118	1,321	,152	1,288	,985	1,006	,983	,994
Presence father groom										
Native (ref.)										
Migrant, father present			,263	1,212			,762	1,091		
Migrant, father not present			,703	1,072			,548	,833		
Presence father bride			,060				,021			
Native (ref.)										
Migrant, father present			,360	1,163			,658	1,136		
Migrant, father not present			,019	1,602			,006	3,410		
Occupational identity										
Same SP-level and sector			,407	,865	,441	,874	,019	,500	,019	,505
Different SP-level and sector			,002	1,723	,002	1,734	,464	1,249	,540	1,201
Same SP-level, different sector (ref.)										
Geographical homogamy										
Native homogamy (ref.)										
Migrant homogamy					,027	1,561			,395	1,340
Mixed					,273	1,168			,236	1,325

³⁰ Model information:

Models	Chi²	Sig	Nagelkerke R²
Model 1	46,5	0,00	0,051
Model 2	77,1	0,00	0,085
Model 2B	74,8	0,00	0,083
Model 3	97,8	0,00	0,107
Model 3B	90,3	0,00	0,099

N = 1221 (model 1); N = 1189 (model 2, 2B, 3 and 3B).

Variables	Model 1	Model 2A	Model 2B	Model 3A	Model 3B
Family witness * Period					
2 or 3 family witnesses * 1851-1873				,233	,624
2 or 3 family witnesses * 1874-1890				,291	1,543
4 family witnesses * 1851-1873				,855	,922
4 family witnesses * 1874-1890				,059	2,364
Presence father groom * Period					
Migrant, father present * 1851-1873				,777	1,123
Migrant, father present * 1874-1890				,592	1,259
Migrant, father not present * 1851-1873				,618	1,245
Migrant, father not present * 1874-1890				,251	1,674
Presence father bride * Period					
Migrant, father present * 1851-1873				,941	,971
Migrant, father present * 1874-1890				,642	1,208
Migrant, father not present * 1851-1873				,023	,285
Migrant, father not present * 1874-1890				,291	,553
Occupational identity * Period					
Same SP-level and sector * 1851-1873				,024	2,580
Same SP-level and sector * 1874-1890				,086	2,105
Different SP-level and sector * 1851-1873				,278	1,589
Different SP-level and sector * 1874-1890				,165	1,837
Geographical homogamy * Period					
Migrant homogamy * 1851-1873					,997
Migrant homogamy * 1874-1890					,255
Mixed * 1851-1873					,252
Mixed * 1874-1890					,918
Constant	,000	5,555	,001	3,079	,002
			2,969	,000	4,624
				,000	4,385

Third, in the period 1800-1850 the level of heterogamy was *not* higher for migrant couples than for others (model 3B). These unrooted migrant couples were in general more heterogamous (see results of model 2B) – they did not need an urban crisis to be heterogamous – while in the urban crisis also the others were heterogamous. This qualifies the previous finding. The urban crisis-effect was *not* present for those who were always strongly integrated (those having the same occupation as their father), and it was also *not* present for those who were never really integrated (migrant couples). It is furthermore meaningful that for the period 1874-1890 (same model, but 1874-1890 as the reference category), we did find a significant higher level of heterogamy for migrant couples (odds ratio = 2,334; $p = 0,016$). In that period, the more rooted population had increased homogamy.

Altogether, the results from model 3 (although not always strong) support the view that the high level of heterogamy during the urban crisis was related to the pressure it put on migrant brides whose father was not present and on those who were not working in the same sector as their father. In the subsequent period, homogamy increased, and this was mainly the result of the partner selection of those couples that were 'partly rooted', that is, those couples that did not belong to the migrant outgroup – who was always heterogamous – and those couples that did not belong to the very rooted group of couples of which the husband had the same occupation as his father – who even during the urban crisis married homogamous.

Conclusion

The observation of a temporary high level of social heterogamy for the lower classes during the urban crisis³¹ is important as it is a contradiction of the idea that heterogamy gradually increased during the 19th century as a result of industrialization and modernization (thesis of industrialism). The pattern found for Ghent and Verviers in the period 1800-1890 indeed shows the reversed pattern. Of course, this does not exclude that modernization led to societal openness in a later stage, or in other locations. But this finding does add complexity to the debate on partner selection.

First, societal openness is as such not typically modern, a fact perhaps a bit surprising for disciplines such as sociology that have the distinction between traditional and modern society as a classic key issue (Ritzer, 1992).

Second, we can make a formal claim about one way in which the historical socio-economic context influenced the process of group formation. Early industrial cities that underwent an urban crisis experienced an early, but temporary, increase of heterogamy. This claim echoes the view, proposed in social mobility research, that there was an 'early jump' in social mobility during the economic take-off (see Fukumoto & Grusky, 1993). Yet, the latter theory does not predict that an early increase of social mobility was only temporary and, as typically inspired by the functionalist logic that modern industrialism requires a fluid mobility regime, it also identifies different causes underlying the pattern.

Also in other eras and locations context characteristics, that for example influence patterns of group belonging, social control or meeting opportunities may have had similar effects. Therefore, this research is, in a sense, a claim for a more thorough examination of the historical context as a necessary step to unravel the evolution of societal openness.

Third, a clear picture of marital mobility in industrial contexts starts to emerge. We can now identify, based on research using the same class scheme, two periods of decreasing homogamy: one period during the early-industrial urban crisis, and one very late in the nineteenth century when more mature, demographically stable industrial cities were characterized by, for example, intense class conflict and/or profound labor movement activity (see Van de Putte & Miles, 2005; Van de Putte & Miles, 2006).

While the pattern of partner selection is clear, the precise reasons underlying it are less so. There were some important findings however. First, particularly migrant brides whose father was not present had more chance to marry heterogamous. This supports the view that these conditions limited the father's possibility to interfere. Second, there is the role of occupational identity. The urban crisis-effect was not caused by a strong increase of the number of grooms working in a different occupational sector than their fathers. But we did find that during the urban crisis, grooms working in the same sector as their father were more homogamous than those who

³¹ This view on the limited impact of one's social origin during the urban crisis may seem to contradict the widely held vision that in times of crisis the importance of family support increased (Kocka, 1984; van Poppel & Nelissen, 1999). The latter vision is, of course, plausible, in the sense that in these conditions presumably all potential channels of support were used. But this does not necessarily imply that social origin was more rigidly used as a criterion of partner selection. The conditions under which social origin is a criterion in partner selection are that one's social origin is, first, known by the parties involved, and, second, estimated, at the time of marriage, as more useful compared to the social positions and characteristics of the spouses themselves. In our opinion, in times of urban crisis these conditions were not fulfilled.

were not. Being integrated in the father's social circle prevented heterogamy. Apparently, the urban crisis-effect was not the effect of the persons most rooted in traditional city life. But a third observation shows that it was also not the effect of the most marginalized part of the city population. In general, migrant couples had more chance to marry heterogamous than native or mixed couples. This difference was however not present during the urban crisis. In our interpretation, the urban crisis made the biggest difference for the 'middle' group that was not attached to the sectoral life of the father, but was also not isolated in a migrant social circle.

It must be stressed, however, that some possible effects of the urban crisis could not be measured. The consequences of the low or declining standard-of-living and the dramatic population growth are for example difficult to address by variables measured at the individual level.

Although the findings of this study are, perhaps, somewhat controversial in the perspective of the research on partner selection and modernization, they are less unexpected when considering the literature in other research fields. In a way, we simply extended the discussion on the impact of a paroxystic period of maximal population increase on nuptiality, fertility and mortality in early-industrial (metallurgic) cities (Bourdelaïs, 2000). Furthermore, the early-nineteenth century city has been associated with other 'disruptive' behavior, such as illegitimacy (Fuchs & Moch, 1990; Cloet, 1991; Cooper, 1999) and unmarried cohabitation (Matovic, 1990; Lynch, 1991; Ratcliffe, 1996). Also in this line of research the argument holds that in changing urban contexts, the lower class was characterized by a specific demographic culture and behavior.³² These studies showed what can be called the rise of the 'informal marriage system' (Seccombe, 1993: 59) and, indeed, the high level of social heterogamy fits very well in this picture.

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³² Also in Ghent there is a high level of illegitimacy (Art, 1972; Cloet, 1991: 438-439) and probably unmarried cohabitation (Van de Putte, 2005). According to Alter (1988: 112), Verviers "had a moderately high illegitimacy ratio (about 9 percent of all births were illegitimate) and a very high rate of bridal pregnancy (30-40 percent)".

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