

Partner Selection in 19th Century Western Flanders: a Complex Process

The Effect of Age Homogamy on Social Heterogamy

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Nina Van den Driessche (Nina.VandenDriessche@UGent.be)

Bart Van de Putte (Bart.VandePutte@UGent.be)

HeDeRa, Health and Demographic Research at Ghent University
Department of Sociology
Ghent University
Korte Meer 5
B-9000 Gent (Belgium)

Note: These findings are very preliminary – please do not quote.

Abstract

Age homogamy and social heterogamy both have been associated with the erosion of the European Marriage Pattern (EMP) in Western Europe (i.e. a declining mean age at first marriage and declining permanent celibacy) and are said to be indicative of a more egalitarian, romantic view on marriage and partner selection. Both variables have been examined extensively, but little attention has been paid to the relationship between age homogamy and social heterogamy. We hypothesize that individuals choose their partner according to a number of criteria (for instance age, social class, ethnicity), but that these choices are inevitable prioritized. In the current study we focus on the effect of age homogamy on social heterogamy. If there is a more egalitarian view on marriage, which leads to a preference for an age peer, someone who has the same life experiences and social norms as theirs, this could have as an indirect consequence someone with other characteristics than theirs (for example: a different social class). We are especially interested in the way this effect differs according to social class and period and will pay special attention to the role of urbanization. A softer version of the hypothesis states that age homogamy does not necessarily lead to social heterogamy. Here, the assumption is that most classes are large enough to combine both instrumental and egalitarian partner selection criteria. For the Western Flanders data we found evidence that corroborates the main hypothesis, namely that age homogamy leads to social heterogamy, as a consequence of the preference for an age peer, but no hard evidence has been found for the softer version of the hypothesis. The effect is prevalent for almost each social class/ occupational group, except for the skilled workers and the unskilled workers, which could point to the fact that those groups were able to combine both instrumental and non-instrumental partner choice criteria.

Introduction

The industrial revolution brought about far-reaching changes in the (second half) of the 19th century in the Low Countries. These qualitative and quantitative transformations put a strain on the old patterns of behavior. As for marriage, an erosion of the Western European marriage pattern (EMP) occurred (Hajnal, 1965). From the 16th century onwards Western Europe was characterized by late marriage and often no marriage took place at all (high permanent celibacy). One observation that made the pattern unique according to Hajnal (1965) was the high age at marriage of women, rather than a high age of marriage for men, combined with a relative small age difference between husband and wife (in comparison to the rest of the world). The EMP can be described as economical and instrumental. One could only marry if one had the economic resources to support a family. Mid-19th century, this pattern eroded: the mean age at first marriage declined significantly, as did the share of permanently unmarried people. Factors that are classically associated with that transformation are industrialization, the increased standard of living, and urbanization. These circumstances created an atmosphere that weakened the marital norms, because they became less useful. Moreover, Shorter (1975) saw an evolution to a more egalitarian view on marriage and partner selection. Intimacy, emotionality and sentimentalism became pivotal in a relationship. This cultural shift has been tested and corroborated by Coontz (2005) and Van de Putte et al. (2009) among others.

Both social homogamy and age homogamy have been related to a more egalitarian view on marriage. For social homogamy, the modernization thesis supposes that when societies become more open and egalitarian, people tend to marry more across social boundaries. When individuals marry across those social boundaries, it indicates that the partners see each other as equals or that these features are not relevant in the process of partner selection (Van de Putte et al., 2005). Age homogamy has been considered as indicative of the equality of a relationship. Large age differences between spouses point to an economical contract and denote a patriarchal system. Small age differences appear to be more equal in nature and can be seen as an essential part in the emergence of romantic love, because age peers have more in common, i.e. values and life experiences (Van de Putte et al., 2009). Thus, we can interpret this development as a shift from an economical, instrumental partner choice to a more egalitarian view on marriage and partner selection.

Various authors (Beekink et al., 1998; Dribe and Lundh, 2009) state that partner selection in the marriage market should not be limited to only one dimension. After all, marriage is a complex process in which the determinants interact with each other. Individuals choose their partner according to a number of characteristics (for example age, social class, ethnicity). But these choices are inevitably prioritized. If there is a more egalitarian view on marriage, which leads to a preference for an age peer, someone who has the same life experiences and social norm as theirs, this could have someone with other characteristics than theirs (for example: a different social class) as an indirect consequence. Following this assumption, we can expect, if we find a trend to more age homogamous and social heterogamous marriages in the course of the 19th century, that these variables are linked together. Our main hypothesis is that age homogamy leads to social heterogamy, as an indirect consequence of the preference for an age homogamous marriage.

Theory

1. Age Homogamy and Less Instrumental Partner Selection

Bozon (1991:121) states that *'age is no simple, unchanging and objective reality but a complex socio-historical construction which institutes classifications, comparisons, oppositions...'*. Consequently, the degree of age differences between spouses reveals important information about the society and a shift in age differences is indicative of larger societal changes. Relating to this, information on age differences between men and women has been considered as an indirect measure of the instrumentality or equality of a marital relationship, or the extent to which instrumental considerations matter in the partner selection.

Although a relative small age difference has been a defining characteristic of the EMP (Hajnal, 1965), and a certain degree of homogamy has been prevalent in all periods and all times, there has been a steady rise in age homogamy in the course of the 19th century (Beekink et al., 1998; Van de Putte et al., 2001a; Van Poppel, 2005; Van de Putte et al., 2009). Shorter (1975) attributes this shift to a the consequence of the (first) sexual revolution (sexual revolution thesis) and as a prerequisite of romantic love. He claims that marriage in former centuries was void of love and was held together by concerns of property and lineage. The wider community controlled who married whom, and the main focus was the protection of economic and demographic stability. This instrumental view on marriage and partner selection was a logic strategy in times of poverty and an insecure standard of living and in societies where the economic opportunities were limited and largely dependent on property (Van de Putte et al., 2009; Van de Putte, 2005). Moreover, it was a system that perpetuated the wife's subordination to her husband. This is related to the asymmetrical assets men and women bring into the marriage (Bozon, 1991): men trade their social status and income (for which they need to be older, especially in non-industrialized societies) for the beauty and youth, which symbolize health and fecundity, of women (see also: Dribe and Lundh, 2010). This age difference gives the husband a significant advantage in status, experience and power (Van de Putte, 2009). In most societies where the grooms are older, there is evidence of a patrilineal kinship structure and patrilocality. Even if we cannot attribute patriarchy as an inherent characteristic of the EMP, it was most definitely the way in which this instrumental marriage pattern was applied (Van de Putte, 2009).

In the course of the 19th century, the EMP eroded. Despite the already relative small age differences compared to the rest of the world, various authors describe a rise in age homogamy in the course of the 19th century (Beekink et al., 1998; Van de Putte et al., 2001a; Van Poppel, 2005; Van de Putte et al., 2009). Van de Putte et al. (2009) consider this shift one of the key characteristics of the change in the EMP. Classically, this has been interpreted as a relaxation of strict marital norms. The increase of the standard of living, industrialization and urbanization were processes that made old patterns less useful. But, although the rise of age homogamy occurred together with the decline of age at first marriage, this is not the simple product of the relaxation of the Malthusian marriage principles, because the effect still holds after controlling for the structure of the marriage market (Van de Putte, 2009). This finding confirms the sexual revolution theory of Shorter (1975). His theory relates the

erosion of the EMP to a cultural shift, a shift from an instrumental view on marriage and partner selection to a more egalitarian one. Shorter (1975) connects individual preferences to a change in institutional context, to migration and urbanization, mass communication, secularization and other factors. The transformation to a more egalitarian view on marriage patterns can be traced back to two important features. The first was the replacement of the old imposed value system that emphasized the generational responsibility and the accountability to the community with a value system that stressed individual happiness, self-expression and self-development. The second feature was the privatization of partner selection. Whereas the old system was based on public dances and other courtship customs, the new system was based on intimacy, sentimentalism, empathy and spontaneity and was taken out of the public sphere. The rise of age homogamy can be related to this shift to a less instrumental, more egalitarian view on marriage and partner choice. The notion of romantic love calls for equality between husband and wife. Large age differences denote an inherent power aspect in favor of the older husband. Small age differences point to equal relationship and bring about the spontaneity, empathy and intimacy that characterize the new value system. Age peers have more in common, i.e. life experiences, shared value systems, taste in leisure activities, etc. All this enables conversation and mutual understanding and confirmation of each other's behavior and worldviews. For these reasons, we can assume that age homogamy will be the result of a less instrumental marriage partner selection.

The rise in age homogamy has been related to a wide variety of aspects, for instance to migration, urbanization, increased female wage labor participation, secularization, education, a higher standard of living and other factors related to a modernizing society (Shorter, 1975; Wheeler and Gunter, 1987 and Van de Putte et al., 2009). In a society influenced by such modernization processes, we expect instrumental considerations to become less important, in favor of romantic love and emotionalism. Given that age peers have more in common, we expect an increase in age homogamous couples as a society becomes more modernized (Van Poppel et al., 2001). The keenness to adopt a new orientation towards marriage differs according to time, place and religion. Overall we can expect that the lower classes, people who live in big cities and individuals living in non-catholic regions are more prone to adopt an egalitarian, non-instrumental marriage strategy and are more inclined to initiate the associated cultural change to a more romantic notion of love. The effect differs according to class (Van de Putte et al., 2009). The elite and farmers are the least likely to adapt the new pattern. For both groups, the inheritance of land and wealth is the most important factor in determining who marries whom. In contrast to the upper classes, the lower classes are the least connected to property. They should be one of the first groups to embrace the new marriage pattern. Cities are at the core of the industrialization process and are the core areas of cultural change. The Catholic religion emphasize parental authority and patriarchal control over wife and children. It is to expect that the degree of Catholicism also has an important impact on the success or otherwise of the adoption of the new emerging marriage pattern.

We discern three types of age homogamous or heterogamous marriages: the older husband marriages (OHM), the same age marriages (SAM) and the older wife marriages (OWM). The OHM's are the dominant type. This type is characterized by the old economical, instrumental view on

marriage and can be attributed to a patriarchal society. In the SAM's we see the new view on marriage emerge, one that is based on equality and intimacy. The OWM's are rare and are the most instrumental of them all. For instance: the older the women is, the more chance that she has saved up some money, owned her own farm of livestock. Moreover, there was a strong intolerance towards those unions, because they 'reversed the natural order of things' (Van de Putte et al., 2009).

2. Link between age homogamy and social heterogamy

As mentioned before, partner selection should not be limited to only one dimension. The determinants of marriage selection therefore need to be studied in one comprehensive analysis. It is also important to determine how these various determinants interact with each other. There is evidence that both social status and age are important features of the partner selection pattern (Dribe and Lundh, 2009; Van de Putte et al., 2009). Men and women do not simply choose spouses on the basis of their age or social class, they take a various number of characteristics into account: the partner's religious affiliation, migration status, ethnicity, educational level, personal preferences in looks etc. These choices are inevitable prioritized and dependent on how strong the existing barriers are (Beekink et al., 1998). Related to our topic we can hypothesize that if there is indeed a more egalitarian view on marriage and partner selection, which would be visible in a preference for a partner of their own age cohort, this could have social heterogamy as an indirect consequence. This means that individuals who marry age homogamous will have a higher chance to choose a partner from outside their own class or occupational category. A softer version of this hypothesis states that non-instrumental criteria could be combined with classic, instrumental criteria. In that case, age homogamy does not necessarily lead to social heterogamy. Here, the assumption is that most classes are large enough to combine both instrumental and egalitarian partner selection criteria. An exception to this softer model would be the smaller groups, such as the elite where a combination of both characteristics would be more difficult. In the analysis, we will also add a few interaction effects. Firstly, concerning the softer version of the hypothesis, we expect interaction for social class or occupational group (operationalization based on the SOCP0-scheme of Van de Putte & Miles, 2005). We expect a larger effect of age homogamy on social heterogamy for the smaller classes (the elite) because they cannot combine both instrumental and non-instrumental preferences. Second, we are also interested in the evolution of the effect over time. Finally, we would also like to include the role of context. Thus, interaction terms for urbanization will be added. We expect the age homogamous who live in big cities to have more freedom to choose a partner from outside their own occupational group.

3. Control variables

To obtain a more comprehensive idea on which mechanisms influence social heterogamy, we conclude a set of variables that typically are related to social heterogamy (see also: Van de Putte et al., 2001b). At the individual level we included period, class, social mobility, lent or advent marriage, literacy, migrant status and marital status. For period, we expect a rise in social heterogamy over time. As far as class is concerned, we anticipate the elite and the farmers to have the lowest levels of

social heterogamy and the lower and middle classes the highest levels. It is logical to assume that social mobility will have a positive effect on social heterogamy, because the nature of the concept implies crossing social boundaries. Regarding to the level of Catholicism, we expect the individuals marrying within periods of clerical marriage bans to be positively related to social heterogamy. Migrants should be positively associated to social heterogamy. Migration has been connected to social heterogamy due to a negative view on migration and stigma, especially when they were forced to leave their homes (associated with downwards social mobility). But sometimes migration is related to dynamism and upwards social mobility (Van de Putte, 2006; Dribe and Lundh, 2010). Finally, we expect marital status to be an important control variable. Second marriages have other specifics than first marriages (Van de Putte et al., 2009). We also added some context variables. Rein (1974) points in this respect to the fact that there is no such thing as general laws in the social sciences that are constant over time and independent of context. Therefore, failure to take contexts into account might be an important explanation for the often contradictory results that have been found in the research area (Van Leeuwen, 2009b). The relevant institutional contexts are: industrialization and other economic changes, educational expansion, guilds, trade unions and other professional organizations, political regimes, urbanization, wars, marriage bars and inheritance patterns (Van Leeuwen, 2009a). The following context variables are included: urbanization (the great surge of sentiments begins earlier in the cities than in the countryside), percentage of migrants (open vs. closed system), and a few classic variables that reflect occupational structure (percentage of farmers) and property structure (agricultural ownership and land size).

Context (Western Flanders)

Western Flanders is a coastal province in Flanders, Belgium. The Belgium Revolution, which led to independence in 1830, coincided with the South taking great strides to economic modernization. Changes in technique and industry were rapidly improving and the speed in which it all occurred took people aback. Due to favorable conditions, as the liquidation of the ecclesiastic land and progressive credit guarantees, entrepreneurs were able to accumulate wealth. New machinery and other technical advances found their way from England to the continent, especially in the wool- and cotton industry, in the metallurgical industry and in coalmining. Belgium pioneered the industrial revolution on the European continent, especially in cities such as Ghent, Aalst, Verviers and Liège (Van de Putte et al., 2009). But in 1830 these innovations were still rare. Most of the industry and its employees still worked with outdated methods in small enterprises. But, with limited recourses and a meager quantity of manufacturing, these old production methods awaited a slow death. The heavy industry (especially in the Walloon region) and the cotton –and wool industry were largely industrialized by 1846. In the case of Western Flanders, industrialization arrived later. This is largely due to the fact that its economy was mainly based on agricultural activities and to the linen and flax industry in which one third of the population at that time was employed (Van Houtte, et al., 1955). In some municipalities, for example Tielt or Roeselare, this number was as big as two thirds of the active population. In contrast to the manufacturing of wool or cotton, which was produced by wage labor in factories, linen or flax still were to a large extent made by small family businesses on the countryside. These families were farmers who made some additional earning by spinning flax or weaving linen. Mechanization of both trades came late and there were some conservative voices in the clergy and the political world that protected the old fashioned industry by means of trade

embargo's, export subsidies and the levy of revenue taxes, especially in the case of the flax industry. But in spite of the protection of the industry, the Flanders linen was too expensive and could not face competition with the mechanically woven English linen. By 1845 the industry faced a deep crisis, which was particularly hard on the spinners and weavers. Their diet and general living conditions were very poor. Because of this, they depended heavily on their farming incomes. But a series of crop failure put West Flanders in a deep crisis which led to starvation, epidemics, high prices and low wages. These miserable circumstances forced the government to act. They organized trainings that enabled the craftsmen to be able to face the competition. From this moment onwards the linen and flax industry followed the general tendencies of the industrial revolution. By 1880, the industrial revolution had set foot in Western Flanders, industry was mechanized and more and more individuals ended up in the factories (also made possible by Belgian railway that provided favorable prices for workmen). Most of them still tilled the land, but their main activity was the industrial sector, contrary to the old pre-industrious days (Van Houtte, et al., 1955).

Data

To analyze the research question we make use of an extensive historical database, which gives us the opportunity to take a look at the mechanisms that influenced 19th century marital behavior. Former research has been limited to small communities or were restricted to short time spans. In the last decades vast efforts have been made to construct large databases that makes comparison over a sizeable time span and over different countries possible. At the moment we limit this research to Western Flanders, but in the future we would like to include information on other provinces in both Belgium and the Netherlands. We use information of marriage certificates collected by the State Archive of Bruges. The Civil Register was introduced in 1796, under the rein of Napoleon. The earliest observations are not included because the registration in the earlier years was subject to some growing pains. Thus, the period under investigation is 1800-1913. All marriages are included in the database, with the total amount of marriage certificates being 261.581 spread over 187 municipalities. Marriage certificates contain very valuable information. Moreover, they cover the population as a whole and is not limited to a privileged group. For this paper we included date of birth and date of marriage for both bride and groom; occupational information on groom, the groom's father and the bride's father; month and year of marriage; signatures of the couple; place of birth and residence and place of marriage. We also included some aggregated data (for each municipality) derived from the agricultural census of 1846. Following variables are used: total population; agricultural exploitation, total; number of individuals employed in the agricultural sector, for men and women; size of property and amount of usufruct of property.

Method

Because we want to take context into account, the appropriate way to analyze our data is multilevel analysis. In multilevel research, one investigates the interaction between characteristics of individual (level 1 – the individual level) and characteristics of the group the individuals belong to (level 2 – the aggregated level) (Hox, 2002). Because marriage certificates are clustered within municipalities, we will have to work out if individuals of a certain municipality are more alike than individuals of another

town. In the case of municipalities this will be most likely because persons share a common history and are socialized in a similar context. Multilevel analysis is also the proper method to analyze cross-level interactions, i.e. interactions between the individual and the group effects. Individuals differ from each other in the way they are influenced by particular aspects of the context. Multilevel analysis is also able to reveal these processes.

Because our dependent variable is dichotomous (social heterogamy), the assumptions of continuity, the homoscedasticity and the normality assumption are violated. The approach we use to overcome this problem is to explicitly include the transformation (logistic) and the appropriate error-distribution (binomial) into the statistical model. These models are referred to as general linear models and can be defined by three components. For dichotomous data these are (Hox, 2002: 105):

1. The probability distribution is binomial (μ) with mean μ
2. The linear predictor is the multiple regression equation for η , e.g., $\eta = \beta_0 + \beta_1 X_1 + \beta_2 X_2$
3. The link function is the logit function given by $\eta = \text{logit}(\mu)$

The software that has been used in this research is MLwiN, a statistical software package that takes the hierarchical structure of the data into account. Moreover, this software is able to model dichotomous data in a multilevel logistic regression model. We use 2-level multilevel logistic regression to investigate whether or not there is an effect of age homogamy on social homogamy. First, a general stepwise model will be tested to examine the effect of age homogamy on social homogamy (hypothesis 1), controlling for social class, period, lent or advent marriage, literacy, marital status, migrant status (individual level) and for urbanization, percentage of migrants, percentage of farmers and property structure (municipal level). Subsequently, interaction terms for social class (hypothesis 2), period (hypothesis 3) and cross-level for urbanization (hypothesis 4) will be added to the basic model to investigate whether the effect differs according to class, period or degree of urbanization.

Descriptive Information

Before turning to the regression analysis, we will examine some descriptive results. As mentioned before, Western Flanders was late in the process of industrialization in comparison with the rest of the country. It wasn't until 1880 that Western Flanders had experienced their industrial take-off. If industrialization, the increased standard of living, and urbanization are indeed connected to a gradual transition from an instrumental view to a more egalitarian view on marriage and partner selection, we can assume that both social heterogamous marriages and age homogamous marriages only increased around 1880. Figure 1 shows the percentages of social homogamous and social heterogamous marriages through the 19th century for the Western Flanders data. There is indeed an steady increase in social heterogamous marriages from 1875 onwards. Contrary to what we expected, we also notice an initial rise in social heterogamy (1805-1820) followed by a decline in social heterogamy until 1875. This suggest that industrialization is not the only factor that influences a less instrumental partner choice.

Figure 1. Percentage of social heterogamous and homogamous marriages by period of marriage (Western Flanders)

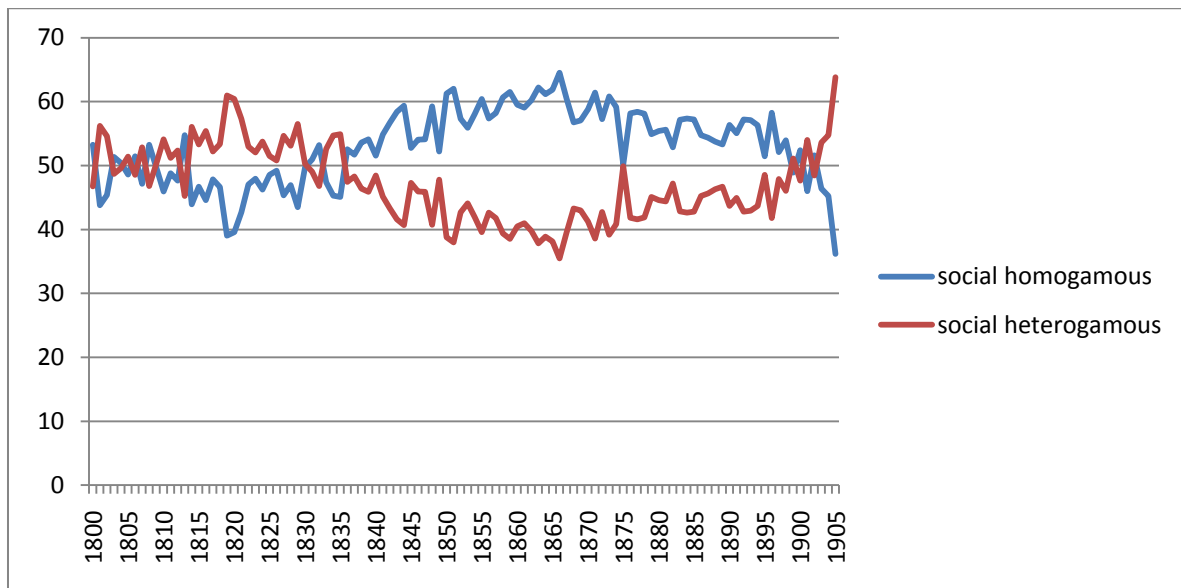
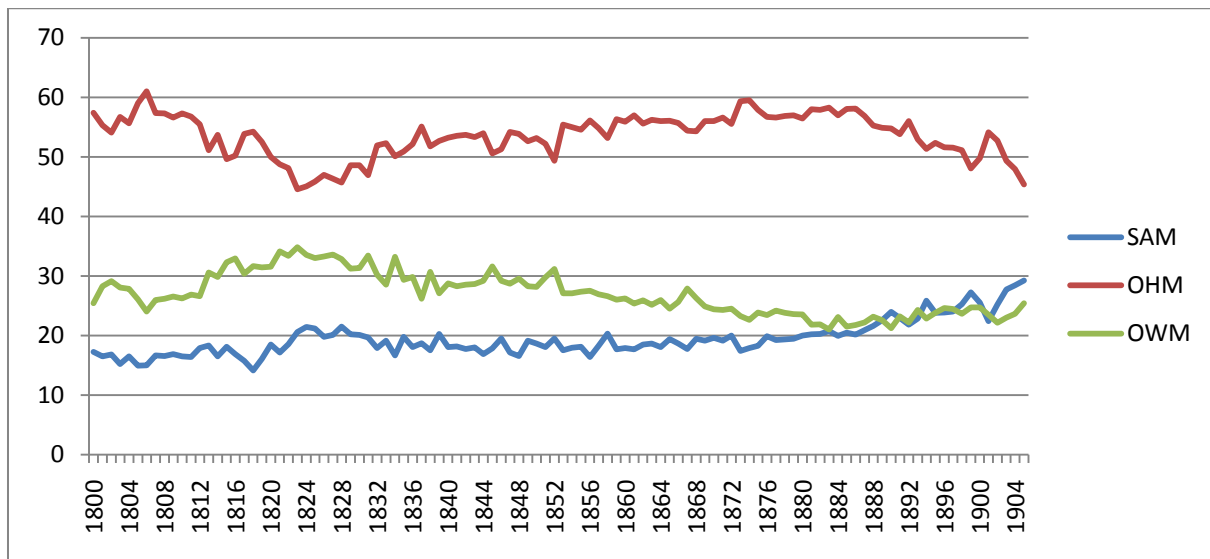


Figure 2 allows us to take a closer look at the percentages of age homogamous marriages, older husband marriages and older wife marriages in the course of 19th century Western Flanders. The results are less univocal, but here too there is a gradual rise in the proportion of age homogamous marriages since 1875. This goes hand in hand with an steady decrease of older husband marriages, albeit this kind of union is still the dominant one. One discrepant finding is the fact that the rise of age homogamous marriages, illustrative of a less instrumental view on partner selection, is accompanied by a small increase in older wife marriages, which is the most economic, instrumental of all marriage types. Furthermore, relating to the observations made in the descriptive analysis of the pattern of social heterogamy, we also observe an initial rise in age homogamy during the period 1805-1820 followed by stagnation in social heterogamy until 1875. Again, we point to the fact that industrialization might not the only factor that influences social heterogamy.

Figure 2. Percentage age homogamous marriages, older husband marriages and older wife marriages by period of marriage (Western Flanders)



The descriptive results support our thesis that there is an increase in social and age homogamous marriages, albeit not a linear one, in the course of the 19th century and that the pattern is similar for both variables, so it appears that both variables are connected to each other. We now turn to the multivariate analysis to examine the relationship of these two dimensions of marital partner selection and to uncover the processes that influence that relationship.

Multivariate Analysis

Model 1: The Basis Model

First, we tested for the main effect of age homogamy on social heterogamy (hypothesis 1), controlled for a range of variables on the individual level and some contextual variables. To be able to determine if there are differences in the occurrence social homogamy between the municipalities, we included random intercepts. The results are shown in Table 1. The main hypothesis, namely that age homogamy leads to social heterogamy, can be confirmed (model 1c). This effect did not disappear when controlling for individual characteristics (model 1k) and variables on the municipal level (model 1p). In the full model (model 1p) the odds of marrying with someone of a different social class are 1,050 times higher for the age homogamous than for the older husband marriages. The effect is very small, but we can conclude that individuals in an age homogamous marriage have a small tendency to marry across class boundaries.

In addition to age homogamy, we included a set of variables on the individual level. As the effects hardly change after controlling for the level 2-variables we turn to model 1p. Overall class does not seem to be associated with social heterogamy. The effects hardly differ from the unskilled workers. The only group that differed significantly from the unskilled workers (SP-1) are the farmers (SP-42). In comparison to the unskilled workers, they tended to marry more socially heterogamous, which conflict with the hypothesis which states that farmers would have one of the lowest levels of social

heterogamy. One possible explanation is that most farmers had dual income, which made contact with other social groups possible and intermarriage more plausible. For period, the picture is less clear. The chances of marrying age heterogamous are higher in the reference category 1800-1830 than in any other time period. The effects are smaller for the latter periods which suggest there was a fall in age heterogamy during 1831-1870 followed by another rise in age heterogamy from 1871 onwards. This is in line with the descriptive results found in figure 1. We use lent or advent marriage as an proxy for the degree of Catholicism. The odds of marrying into a socially heterogamous union are, as expected, higher for the individuals that married in the lent or advent periods than the people that married outside those periods. Thus, less religious people have a higher chance of marrying across class boundaries. Literacy is for both bride and groom positively related to social heterogamy. Illiterate individuals have higher odds of entering a socially mixed marriage. This could be related to downwards social mobility, especially for women, hence the higher effects for women. For marital status, we also find some results that could be related to downwards or upwards social mobility. Men that have been married before have lower odds to marry outside their class than individuals that marry for the first time. For women, this is the other way around. Migrant status also mattered. When one of the partners is a local, they have higher odds to marry socially heterogamous than when both partners are immigrants. Contrary to this, when both partners are locals, the chances of marrying across social boundaries are smaller. In this case too, it would be interesting to relate these findings to upwards and downwards mobility. This calls for a multinomial approach that takes the direction of mobility into account for both men and women. Further research that focuses on the direction of mobility could find it useful to include variables such as literacy, marital status and migrant status.

Next we turn to the variables at the municipal level. As expected, people living in big cities have better chances of marrying with someone of different social status. This seems not to be the case for provincial towns where the odds of marrying social heterogamous is smaller than in small towns. This could be attributed to the fact that provincial cities and large cities have more individuals to choose from than small towns on the countryside. In these areas it might be possible to combine both instrumental and non-instrumental partner choice criteria. Further light will be shed on this when we discuss model 4. The percentage of migrants, as indicative of an open versus closed system is also significant. The odds on marrying socially heterogamous are lower in areas where they have a higher density of migrants. For the percentage of farmers, the chances of entering a social heterogamous union are smaller if the proportion of farmers in a municipality is higher. Contradictory to this, land ownership (proportion of half of full ownership in a municipality) is positively related to social heterogamy. Finally, the higher proportion of farmers in a municipality who only own a small piece of land, the higher the odds are for a social heterogamous marriage.

In short, we can corroborate our main hypothesis that age homogamy leads to social homogamy. This means that those who marry age homogamous have more chance to choose a partner outside their own class or occupational category. We consider the choice for an individual of a different class as an indirect side-effect of the preference for an age peer. We are also interested in how this effect

varies according to social class, period and degree of urbanization. In model 2, 3 and 4, we add interaction terms for all three variables.

Table 1. Results for the two-level logistic regression analysis for model 1

	Model 1b		Model 1c		Model 1k		Model 1p	
	odds	S.E.(x)	odds	S.E.(x)	odds	S.E.(x)	odds	S.E.(x)
Intercept	0,752	0,027	0,726	0,029	0,291	0,064	0,236***	0,263
Variables								
Age Homogamy								
<i>Older Husband Marriage (ref)</i>								
<i>Same Age Marriage</i>			1,050***	0,025	1,064***	0,041	1,069***	0,042
<i>Older Wife Marriage</i>			1,107	0,025	1,067***	0,042	1,069***	0,042
Social Status								
<i>SP-level 1 (ref)</i>								
<i>SP-level 2</i>					4,208	0,059	4,063	0,060
<i>SP-level 3</i>					8,298	0,070	8,037	0,070
<i>SP-level 41</i>					1,028***	0,054	1,028***	0,055
<i>SP-level 42 + 5</i>					2,596	0,066	2,502	0,067
Period								
<i>1800-1830 (ref)</i>								
<i>1831-1850</i>					0,996***	0,059	0,995***	0,060
<i>1851-1870</i>					0,867***	0,058	0,873***	0,059
<i>1871-1890</i>					0,891***	0,057	0,904***	0,058
<i>1891-1913</i>					0,964***	0,061	0,968***	0,062
Social Mobility								
<i>no social mobility (ref)</i>								
<i>downwards social mobility</i>					3,360	0,052	3,353	0,053
<i>upwards social mobility</i>					2,044	0,046	2,040	0,047
Lent/advent marriage								
<i>no (ref)</i>								
<i>yes</i>					1,028***	0,085	1,013***	0,085
Literacy (groom)								
<i>literate (ref)</i>								
<i>illiterate</i>					1,074***	0,045	1,065***	0,045
Literacy (bride)								
<i>literate (ref)</i>								
<i>illiterate</i>					1,140***	0,042	1,148***	0,042
Migrant Status								
<i>both immigrants (ref)</i>								
<i>both locals</i>					0,988***	0,056	0,984***	0,057
<i>bride is immigrant</i>					1,113***	0,043	1,116***	0,044
<i>groom is immigrant</i>					1,080***	0,047	1,083***	0,048
<i>missings</i>					1,224***	0,116	1,218***	0,116
Marital Status (groom)								
<i>first marriage (ref)</i>								
<i>widowed/ divorced</i>					0,987***	0,047	0,989***	0,047

Marital Status (bride)				
<i>first marriage (ref)</i>				
<i>widowed/ divorced</i>			1,100***	0,054
Urbanization				
<i>countryside (ref)</i>				
<i>provincial towns</i>				0,933***
<i>cities</i>				0,150
Percentage of migrants				1,346***
Percentage of Farmers				0,445
Agricultural Ownership				0,799***
Land Size (small)				0,232
				1,059***
				0,348
				1,156***
				0,221

Note: *** sigficant on the 0,001-level

Model 2: Interaction Terms for Age Homogamy and Social Class

In table 2 we added interaction terms for social class (model 2). This enables us to test if the effect of age homogamy on social heterogamy differs according to which social class an individual belongs to (hypothesis 2). We expect a smaller effect in the larger classes, because they are able to combine both instrumental and non-instrumental partner selection criteria. In the smaller classes, e.g. the elite (elite + professional middle class), this might be harder and individuals are forced to look outside their own class if their priority lies in finding an age homogamous partner. The main effect of age homogamy on social homogamy is the same as in Model 1p (see Model 1). The interaction terms show the effect on social heterogamy for each class. The interaction-effects are significant for all categories except for the semi-skilled, which can point to the fact that this group was able to combine both instrumental and egalitarian partner choice criteria. The only class that has lower odds are the skilled workers (SP-level 3). They tend to marry more social homogamous if they choose to marry someone of their own age range. As this is quite a large group, this could indicate that this group combines both instrumental and egalitarian partner choice criteria too. The other groups, however, when married with age peers, are inclined to marry more socially heterogamous. The effect seems to be strongest for the elite and middle class (SP-level 42 + 5), a finding which is also in line with the softer version of the main hypothesis. In this respect, we must point to the fact that we combined the (new) professional middle class with the elite, and that the group is not smaller than any other group in the analysis. We find the smallest significant effect for the reference category, the unskilled workers (SP-level 1). As this is the biggest group in the analysis, we would have expected the effect to be negative or absent. We can put this finding into perspective because it were the lower classes that were the most susceptible to the changing patterns in partner selection, because they did not have any property to protect.

Overall, we can confirm our main hypothesis that for the most occupational groups the age homogamous tend to marry more socially heterogamous. For the unskilled and the skilled workers, the softer version of the main hypothesis, namely that this group combined both instrumental and non-instrumental partner choice criteria, could apply. The rest had to make choices in their

preferences. The choice to engage in an age homogamous marriage, has the indirect consequence of having to marry someone of a different social class, more or less independent of class composition.

Table 2. Basis model with interaction between age homogamy and social status

	Model 1		Model 2	
	odds	S.E.(x)	odds	S.E.(x)
Intercept	0,291	0,263	0,237	0,266
Variables				
Age Homogamy				
<i>Older Husband Marriage (ref)</i>				
<i>Same Age Marriage</i>	1,064***	0,042	1,064***	0,042
<i>Older Wife Marriage</i>	1,067***	0,042	1,067***	0,042
Social Status				
<i>SP-level 1 (ref)</i>				
<i>SP-level 2</i>	4,208	0,06	4,581	0,085
<i>SP-level 3</i>	8,298	0,07	9,747	0,103
<i>SP-level 41</i>	1,028***	0,055	1,023***	0,069
<i>SP-level 42 + 5</i>	2,596	0,067	2,344	0,083
Period				
<i>1800-1830 (ref)</i>				
<i>1831-1850</i>	0,996***	0,06	0,995***	0,06
<i>1851-1870</i>	0,867***	0,059	0,872***	0,059
<i>1871-1890</i>	0,891***	0,058	0,905***	0,058
<i>1891-1913</i>	0,964***	0,062	0,969***	0,062
Social Mobility				
<i>no social mobility (ref)</i>				
<i>downwards social mobility</i>	3,36	0,053	3,343	0,053
<i>upwards social mobility</i>	2,044	0,047	2,032	0,047
Lent/advent marriage				
<i>no (ref)</i>				
<i>yes</i>	1,028***	0,085	1,012	0,085
Literacy (groom)				
<i>literate (ref)</i>				
<i>illiterate</i>	1,074***	0,045	1,065***	0,045
Literacy (bride)				
<i>literate (ref)</i>				
<i>illiterate</i>	1,140***	0,042	1,147***	0,042
Migrant Status				
<i>both partners are immigrants (ref)</i>	0,988***	0,057		
<i>both partners are locals</i>	1,113***	0,044	0,982***	0,057
<i>bride is immigrant</i>	1,080***	0,048	1,115***	0,044
<i>groom is immigrant</i>	1,224***	0,116	1,079***	0,048
<i>missings</i>			1,212***	0,116
Marital Status (groom)				
<i>first marriage (ref)</i>				
<i>widowed/ divorced</i>	0,987***	0,047	0,991***	0,047

Marital Status (bride)				
<i>first marriage (ref)</i>				
<i>widowed/ divorced</i>	1,100***	0,055	1,085***	0,055
Urbanization				
<i>countryside (ref)</i>				
<i>provincial towns</i>	0,933***	0,068	0,934***	0,068
<i>cities</i>	1,181***	0,15	1,185***	0,152
Percentage of migrants	1,346***	0,445	1,317***	0,448
Percentage of Farmers	0,799***	0,232	0,788***	0,234
Agricultural Ownership	1,059***	0,348	1,071***	0,35
Land Size (small)	1,156***	0,221	1,147***	0,222
Interaction Effect				
OHM * SP1				
SAM * SP1			1,101***	0,064
OWM * SP1			1,112***	0,064
OHM * SP2				
SAM * SP2			0,775	0,128
OWM * SP2			1,043***	0,134
OHM * SP3				
SAM * SP3			0,832***	0,156
OWM * SP3			0,732	0,156
OHM * SP41				
SAM * SP41			1,154***	0,109
OWM * SP41			1,099***	0,109
OHM* SP 42+5				
SAM * SP 42+5			1,413***	0,13
OWM * SP 42+5			1,133***	0,13

Note: *** sigficant on the 0,001-level

Model 3: Interaction Terms for Age Homogamy and Period

Table 3 shows the results for the main model (model 1) and the addition of a period-effect (model 3) to the main model to test hypothesis 3. As expected from the descriptive analysis and model 1, we do not find any univocal results. Except for the first and last period, the odds of marrying with someone of a different social class is higher if they choose to marry with someone of their own age group. The results reflect a negative effect for the period 1800-1830, followed by a positive effect during 1831-1850, a less stronger effect during 1851-1870, the strongest positive effect in 1880-1891, followed by a negative effect in the last period (1900-1913). The strongest effect coincides with the industrialization in Western Flanders. But the pattern is too unclear to make any straightforward conclusions.

Table 3. Basis model with interaction between age homogamy and period

	Model 1		Model 3	
	odds	S.E.(x)	odds	S.E.(x)
Intercept	0,291	0,263	0,229	0,266
Variables				
Age Homogamy				
<i>Older Husband Marriage (ref)</i>				
<i>Same Age Marriage</i>	1,064***	0,042	1,064***	0,042
<i>Older Wife Marriage</i>	1,067***	0,042	1,067***	0,042
Social Status				
<i>SP-level 1 (ref)</i>				
<i>SP-level 2</i>	4,208	0,060	4,055	0,060
<i>SP-level 3</i>	8,298	0,070	8,045	0,071
<i>SP-level 41</i>	1,028***	0,055	1,027***	0,055
<i>SP-level 42 + 5</i>	2,596	0,067	2,499	0,067
Period				
<i>1800-1830 (ref)</i>				
<i>1831-1850</i>	0,996***	0,060	1,016***	0,086
<i>1851-1870</i>	0,867***	0,059	0,938***	0,083
<i>1871-1890</i>	0,891***	0,058	0,878***	0,079
<i>1891-1913</i>	0,964***	0,062	1,074***	0,085
Social Mobility				
<i>no social mobility (ref)</i>				
<i>downwards social mobility</i>	3,360	0,053	3,360	0,053
<i>upwards social mobility</i>	2,044	0,047	2,036	0,047
Lent/advent marriage				
<i>no (ref)</i>				
<i>yes</i>	1,028***	0,085	1,010***	0,085
Literacy (groom)				
<i>literate (ref)</i>				
<i>illiterate</i>	1,074***	0,045	1,066***	0,045
Literacy (bride)				
<i>literate (ref)</i>				
<i>illiterate</i>	1,14***	0,042	1,148***	0,042
Migrant Status				
<i>both partners are immigrants (ref)</i>				
<i>both partners are locals</i>	0,988***	0,057	0,985***	0,057
<i>bride is immigrant</i>	1,113***	0,044	1,117***	0,044
<i>groom is immigrant</i>	1,08***	0,048	1,083***	0,048
<i>missings</i>	1,224***	0,116	1,219***	0,116
Marital Status (groom)				
<i>first marriage (ref)</i>				
<i>widowed/ divorced</i>	0,987***	0,047	0,990***	0,047
Marital Status (bride)				
<i>first marriage (ref)</i>				

<i>widowed/ divorced</i>	1,100***	0,055	1,087***	0,055
Urbanization				
<i>countryside (ref)</i>				
<i>provincial towns</i>	0,933***	0,068	0,935***	0,068
<i>cities</i>	1,181***	0,150	1,175***	0,150
migrant_perc	1,346***	0,445	1,361***	0,445
farmer_perc	0,799***	0,232	0,797***	0,232
Agr_owner	1,059***	0,348	1,040***	0,347
Agr_sizeS	1,156***	0,221	1,154***	0,221
Interaction Effect				
OHM * 1800-1830				
SAM * 1800-1830			0,995***	0,103
OWM * 1800-1830			1,259***	0,096
OHM * 1831-1850				
SAM * 1831-1850			1,186***	0,147
OWM * 1831-1850			1,018***	0,138
OHM * 1851-1870				
SAM * 1851-1870			1,046***	0,141
OWM * 1851-1870			0,931***	0,134
OHM * 1871-1890				
SAM * 1871-1890			1,209***	0,131
OWM * 1871-1890			1,229***	0,129
OHM * 1891-1913				
SAM * 1891-1913			0,934***	0,133
OWM * 1891-1913			0,923***	0,134

Note: *** sigficant on the 0,001-level

Model 4: Interaction Terms for Age Homogamy and Degree of Urbanization

The last model (model 4) tested in this paper includes interaction terms for degree of urbanization (hypothesis 4). We added random coefficient to the urbanization parameters to evaluate if the effect differs across municipalities. This allows us to evaluate the differences between cities, provincial towns and the countryside. The effects are positive for all categories, albeit the effects are small. The highest effect is found for the cities, the smallest in the countryside. This is in line with our hypothesis that in urban areas the age homogamous have more freedom to choose a partner from outside their own social group.

Table 4. Basis model with interaction between age homogamy and degree of urbanization

	Model 1		Model 4	
	odds	S.E.(x)	odds	S.E.(x)
Intercept	0,291***	0,263	0,239***	0,227
Variables				
Age Homogamy				
<i>Older Husband Marriage (ref)</i>				
<i>Same Age Marriage</i>	1,064***	0,042	1,042***	0,042
<i>Older Wife Marriage</i>	1,067***	0,042	1,043***	0,042
Social Status				
<i>SP-level 1 (ref)</i>				
<i>SP-level 2</i>	4,208	0,060	4,035	0,060
<i>SP-level 3</i>	8,298	0,070	8,012	0,070
<i>SP-level 41</i>	1,028***	0,055	1,029***	0,055
<i>SP-level 42 + 5</i>	2,596	0,067	2,492	0,066
Period				
<i>1800-1830 (ref)</i>				
<i>1831-1850</i>	0,996***	0,060	0,988***	0,060
<i>1851-1870</i>	0,867***	0,059	0,858	0,058
<i>1871-1890</i>	0,891***	0,058	0,889***	0,057
<i>1891-1913</i>	0,964***	0,062	0,949***	0,061
Social Mobility				
<i>no social mobility (ref)</i>				
<i>downwards social mobility</i>	3,360	0,053	3,337	0,052
<i>upwards social mobility</i>	2,044	0,047	2,034	0,046
Lent/advent marriage				
<i>no (ref)</i>				
<i>yes</i>	1,028***	0,085	1,014***	0,085
Literacy (groom)				
<i>literate (ref)</i>				
<i>illiterate</i>	1,074***	0,045	1,065***	0,045
Literacy (bride)				
<i>literate (ref)</i>				
<i>illiterate</i>	1,140***	0,042	1,149***	0,042
Migrant Status				
<i>both partners are immigrants (ref)</i>				
<i>both partners are locals</i>	0,988***	0,057	0,985***	0,057
<i>bride is immigrant</i>	1,113***	0,044	1,117***	0,044
<i>groom is immigrant</i>	1,080***	0,048	1,081***	0,048
<i>missings</i>	1,224***	0,116	1,232***	0,116
Marital Status (groom)				
<i>first marriage (ref)</i>				
<i>widowed/ divorced</i>	0,987***	0,047	0,990***	0,047
Marital Status (bride)				
<i>first marriage (ref)</i>				

<i>widowed/ divorced</i>	1,100***	0,055	1,090***	0,055
Urbanization				
<i>countryside (ref)</i>				
<i>provincial towns</i>	0,933***	0,068	0,943***	0,080
<i>cities</i>	1,181***	0,150	1,070***	0,103
migrant_perc	1,346***	0,445	1,560***	0,364
farmer_perc	0,799***	0,232	0,836***	0,209
Agr_owner	1,059***	0,348	1,044***	0,305
Agr_sizeS	1,156***	0,221	1,004***	0,181
Interaction Effect				
OHM * countryside				
SAM * countryside			1,058***	0,059
OWM * countryside			1,077***	0,058
OHM * provincial towns				
SAM * provincial towns			1,083***	0,093
OWM * provincial towns			0,995***	0,096
OHM * cities				
SAM * cities			1,081***	0,114
OWM * cities			1,177***	0,116

Note: *** significant on the 0,001-level

Discussion and conclusion

Before turning to the conclusion, we would like to point to a few limitations of the present study and the direction we would like to follow in later stages of this research. First of all, we realize the choice of direction is purely theoretically-based. One would need longitudinal analysis to address the directionality of the present research but because we only have cross-sectional data, not much can be done in this respect. The effects that have been found are small, this is probably attributable to the fact that 19th-century Western Flanders was very homogamous in composition. We expect the effects to increase when taking the other provinces and larger cities in Belgium and The Netherlands into account. Aside from including other provinces and cities, the next step is to include the period-variable into a cross-classification model in order to have a more detailed view on the evolution of the effect over time and the variables that influence that evolution.

The aim of this research was to assess the effect of age homogamy on social heterogamy. Overall, we can conclude that there is evidence that age heterogamy leads to social heterogamy, but the effects are quite small. Individuals who find it important to marry an age peer, are more prone to marrying across social boundaries (this as an indirect effect of the choice for an age peer). The effect does not seem to disappear when controlling for a set of variables that are usually associated with social heterogamy. We do not find convincing evidence that supports the softer hypothesis that age homogamous are able to combine both instrumental partner criteria with non-instrumental, except for the unskilled and skilled workers. This group is the only group that is able to combine both instrumental and egalitarian partner selection criteria. We do find the strongest effect for the elite, but the effect is small. All the other groups have to make choices: if they have a preference for an

age homogamous union, they have a higher chance of having to choose across the social boundaries. This might be due to the fact that many individuals in Western Flanders had a dual income which allowed them to come into contact with a larger group of people (especially in respect to the rise in female labor participation). For the period effect, we do not find any univocal results. But, as the pattern is similar for age homogamy, social heterogamy and the effect between the two variables, suggest that these variables are indeed linked to each other. We find that the strongest effect coincides with urbanization which indicates that the process of industrialization is a factor in the shift from more instrumental partner choice criteria to more egalitarian ones, but the effect is also positive for the earlier periods (starting from 1831). Thus, we can conclude there are other factors, besides industrialization, that influence a less instrumental view on marriage and partner selection. Finally, the interaction effects added for degree of urbanization are small. There is a small tendency in the cities of the age homogamous to marry more socially heterogamous. Individuals that live in cities might have more freedom to choose a partner from outside their social group. The positive effect for the people that live on the countryside could also be related to the fact that most farmers had dual income. Consequently, it would be interesting to take dual income in account.

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