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## Changes in Choice of Spouse as an Indicator of a Society in a State of Transition: Woerden, 1830-1930

*Erik Beekink, Aart C. Liefbroer and Frans van Poppel \**

**Abstract:** The 19th and 20th centuries have been an era characterised by social modernisation spurred on primarily by economic developments. This process of modernisation also had an impact on interpersonal relationships and resulted in a more open society. The degree of homogamy between husbands and wives is an important indicator for societal openness, the theory being that the changes which occurred during this period enabled people to be freer and less pragmatic when choosing a spouse. This paper examines this thesis by studying changes in social class, age- and religious homogamy based on marriage data for the town of Woerden during the period 1830-1930. In contrast to other studies which examined the degree of homogamy of each of these variables in isolation, our aim was to reveal the interrelationship between the factors which influenced a person's choice of spouse, using log-linear analyses. The results show that a unidimensional model positing a trend towards increasing openness can be misleading. A decline in social class homogamy and an increase in age homogamy - indicators which would suggest that people had more freedom when it came to choosing a spouse - were found to go hand in hand with an increase in religious homogamy - indicative of a society in the ever-tightening grip of religion.

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## 1. Introduction

The nineteenth century and early part of the twentieth century was a period of fundamental economic, social and cultural change in the Netherlands. Changes on the economic front included a sharp decline in agricultural employment and an increased commercialisation of this sector, an increase in industrialisation and a sharp rise in employment in the tertiary sector. These economic changes brought with them an increase in the standard of living, a strengthening of national unity, urbanisation coupled with a decline in the rural population and a dramatic increase in the educational level of the population.

In general, processes of economic modernisation have a major impact on interpersonal relationships. The dramatic expansion of education and the increased importance attached to knowledge, as well as increased investments in human capital, the increase in social and geographical mobility, the expansion of the welfare state and the shift from 'ascription' to 'achievement' as the measure of a person's status in society, usually result in a broadening of people's horizons and an increase in their autonomy. The broadening of ideological horizons might result in a decline in people's preference for members of their own group and the increase in personal autonomy might reduce the effectiveness of sanctions against transgressions of social norms. Modernisation therefore can be expected to lead to increased contact between the different groups and to a reduction of the social distance between them.

Various authors have attempted to study trends in the degree of openness of society. The information traditionally used to analyse this is data relating to mixed marriages. In an open society, there would be frequent contact between members of different groups; a high frequency of intermarriage between these different groups would be indicative of the existence of such relationships and would also suggest that they viewed each other as social equals. Examples of the types of indicator used to measure the openness of a particular society include data relating to the occupational homogamy of couples (Blau, 1994; Kalmijn, 1991a) and the degree of educational homogamy (Kalmijn, 1991b, Ultee and Luijkx, 1990). Various studies on trends in occupational homogamy for the nineteenth and early twentieth centuries have been published in the Netherlands (Van Leeuwen and Maas, 1991; Van Dijk, Visser and Wolst, 1984). An aspect not dealt with in these studies - an omission common to many studies on the openness of contemporary society - is the fact that homogamy is a multi-dimensional process. Men and women do not simply choose spouses on the basis of their occupation: their decision also takes account of their prospective partner's religious affiliations, geographical origins, ethnic background and age. Examining the differences between couples in terms of their respective occupational status, age, religious affiliations and other relevant selection criteria can provide an insight into what impact the various different dimensions of social stratification have on the individuals involved and how strong the barriers between the different groups are (Kalmijn, 1991a, 10, 66).

The importance of a multidimensional approach to the study of processes of social change is particularly apparent in the Netherlands, because of the potentially contradictory developments that occurred in that country during the nineteenth and early twentieth century. Accompanying the process of economic development were socio-cultural developments that strengthened the influence of ideological groupings on Dutch society. This development - known as 'verzuiling' (literally: pillarisation) - was characterised by a process of ideological fragmentation and social segmentation whereby Dutch society came to be broken up into different, mutually exclusive, religious and socio-political groups known as 'zuilen' (literally: pillars). This religious and socio-political segregation was partly a reaction to the social changes cited above and partly the consequence of efforts by members of the different religious denominations - and at a somewhat later date by the socialist movement as well - to achieve economic, political, social and cultural liberation. During the second half of the nineteenth century, social and technological innovations and the increased level of State centralisation came under fire from Protestants who were opposed to 'modernity' (Woldring and Kuiper, 1980). The combined effect of the various different Protestant groups vying for sovereignty - seen by their main spokesman Kuiper as an attempt to insulate themselves from the detrimental effects of modernisation - and Catholic efforts to achieve equal rights provided the catalyst for this process of segregation. From the last quarter of the nineteenth century onwards, the individual religious groups organised themselves into separate factions in which there was a strong link between political power, social organisation and individual behaviour. To retain their influence, it was important that the different groups (*zuilen*) emphasised their respective differences and maintained the social barriers between them. It was therefore essential that social interaction between members of these different groups was avoided wherever possible (Bax, 1988; Pennings, 1991).

Modernisation might theoretically have been expected to lead to an increase in religiously mixed marriages on the grounds that the broadening of people's ideological horizons would lead to greater tolerance for partners of different religions as well as to a shift in attitude as regards social contact between members of religiously disparate groups. Increased personal autonomy would also diminish the effectiveness of sanctions imposed by members of a person's social network. Hendrickx (1994, 6-8) pointed out that modernisation could also contribute indirectly to religiously mixed marriages in that it is a catalyst for secularisation and desegregation: higher educational levels lead to increased secularisation which in turn leads to desegregation. Moreover, it would become increasingly difficult for people to reconcile the broadening of their horizons with religious and socio-political segregation at an individual level which in turn could weaken individual support for organised segregation. Finally modernisation would also have an adverse effect on a segregated society due to the fact that the role of religious charitable institutions is taken over by government bodies in a welfare state.

If, on the other hand, as argued by Bax (1988) and Ellemers (1984), religious and socio-political segregation is regarded as the specific manifestation of modernisation in the Netherlands - or even as a negative reaction to it - then it is by no means impossible that modernisation in the Netherlands actually resulted in a decline in religious openness during the time the country was in the grips of this process - broadly speaking from 1880 to 1915. However, it is by no means clear whether the religious openness of Dutch society actually decreased. Leenders (unpublished), for instance, suggests that religious and socio-political segregation (*verzuijing*) was actually the extension of the high level of religious segmentation which already existed. Moralists of the past placed 'differences in religious beliefs' top of their list of ill-advised grounds for marriage (Haks, 1982, 108-109). It was an "abomination in the eye of God" warned the Dutch theologian Wittewrongel (1661) - a view which would have been shared by any of his literary contemporaries, whether they were of Calvinist, Remonstrant, Baptist or Catholic persuasion. They would all have agreed with the tenor of a Catholic sermon published in 1776 against mixed, Roman Catholic/Calvinist marriages which, it was believed, would give rise to marital conflict and discord. In the same vein, De Vos, an eighteenth century Baptist vicar from Amsterdam, concluded that fundamental differences in religious beliefs were anathema to pleasant discourse and providing comfort and good cheer (De Vos, 1771). And what sort of educational upbringing would a child have if each of its parents wanted it to be brought up according to their own particular faith? The data collected by Leenders for the town of Hoorn during the first half of the nineteenth century show that, according to local public opinion, mixed marriages were viewed as antisocial behaviour - indeed, were the epitome of antisocial behaviour. Social class and religion held roughly equal sway over the society of the time.

To establish which of the above interpretations is correct, one would need to be able to track the percentages of religiously mixed marriages and to gather information on a period when religious and socio-political segregation had not yet manifested itself. Only then could one establish whether it was formerly also considered inappropriate to associate with people of a different religion. The information currently available on the incidence of religiously mixed marriages during the 19th century is extremely limited, consisting on the one hand of the local parish registers used by Van Leeuwen (1959) - which contain countless incomplete entries, which rarely spanned one continuous period of time and which do not date back further than to the 1850s - and on the other hand of analyses carried out by researchers which cover brief periods of time and which were based on information taken from census records and population registers (Sleebe, 1996; Leenders, 1992).

Another important factor in the partner selection process was age. Historians have viewed the size of the age differences between spouses as indicative of the extent to which instrumental considerations played a role in mate selection

(Shorter, 1975). In a society influenced by modernization processes, such instrumental considerations are expected to become less important, whereas considerations of romantic love and emotional exchange are expected to become more important. Given that age peers have more in common than men and women who differ strongly in age, this would imply an increase in age homogamy between spouses as a society becomes modernized (Van Poppel et al., in press).

Again, changes in age homogamy cannot be viewed in isolation, but are intricately linked to changes in the socio-economic and cultural relationships between segments of the population. For instance, the level of age homogamy is determined in part by the existing opportunities for social interaction between age peers. During the course of modernization these opportunities are enhanced by the increasing length of formal education for all strata of the population, but also by the emergence of specific youth cultures which was facilitated by the growing importance of religiously segregated youth organisations. Furthermore, the importance attached to large age differences differed between social classes. Especially among the propertied classes, an older groom was preferred, because it was much easier to evaluate the economic potential of the groom at advanced than at younger ages. Among the working class, such considerations would probably be less important. These examples underscore the importance of a more integrated analysis of the linkages between different types of homogamy.

This paper will examine what impact the segregation which coincided with the socio-economic modernisation of the Netherlands had on the openness of society. We will examine whether, and if so, to what extent, people chose spouses from their own occupational, religious and age groups. We will also - as far as the data permit - examine the simultaneous impact of these criteria in partner choice. This will be done using data on marriages contracted in Woerden during the period 1826-1930. Although Woerden is not particularly a textbook example of a community which played a significant part in the tempestuous changes which occurred during the period being considered here, one can assume that the changes which affected Dutch society would also have made themselves felt in Woerden.

By focusing our study on a relatively extended period starting from the 1830s onwards, we are in a position to analyse the degree of openness from well before the onset of socio-economic modernisation or religious and socio-political segregation and are also able to make an accurate study of changes in social openness during the period when the above-mentioned processes were taking place and had temporarily peaked. We are also able to distinguish between different phases in the above processes.

The fact that we chose to adopt a long-term perspective and to analyse changes in the three selection criteria puts our research in a unique slot. But in other respects, too - such as the characteristics we chose to study and the

completeness of our data - our research is more comparable to contemporary surveys than to the sometimes rather limited traditional historical studies on changes in the degree of social openness.

## **2. Woerden: a brief summary of changes during the nineteenth and early twentieth centuries**

Woerden is typically portrayed in the literature as a provincial town with unmistakable urban characteristics, functioning as an important market for the surrounding countryside, having its own industry and a well-established middle class (Van der Laarse, 1989, 32-34). At the beginning of the nineteenth century, Woerden had roughly 3,000 inhabitants; by the first few decades of the twentieth century, the figure had increased to more than 7,500.

For many centuries, the region in which Woerden is situated had been a brick and tile manufacturing centre and the brickyards were a major force in Woerden's economy for a considerable time. However, as a result of internal and external competition and modernisation of the production processes, the percentage of the labour force working in this sector declined from 25% around the middle of the nineteenth century to a mere 6% by 1930 (Van der Laarse, 1989, 236).

Simultaneous to the demise of Woerden as a centre of manufacturing, an agricultural boom occurred. This process began as early as 1820 when large areas of woodland in the region were cleared to make way for pasture land, in response to the growing export of dairy products. This dairy-farming region known primarily for its traditional cheese-making thrived during the last quarter of the nineteenth century when agriculture in general was struggling to cope with liberal Dutch trading policies. Whereas agriculture elsewhere in the country was in a state of crisis, the farmers in this area were blessed with a product doing booming trade thanks to a rise in sales on the domestic and, in particular, international markets (Van der Laarse, 1989, 238). The net result was that, compared to the relative fall in employment in the clay processing industry, there was a sharp rise in employment in the cheese trade, dairy farming and the manufacture of agricultural products. Around 1900, these sectors accounted for more than forty percent of employment and thirty years later they accounted for half of the labour force and consequently had a far greater impact on the local community than brick and tile manufacturing had had in the past. Clay, as the driving force behind Woerden's economy, was therefore superseded by cheese (Van der Laarse, 1989, 240).

But it was not only in an economic sense that Woerden remained dominated by a rather 'traditional' structure. The region around Woerden and Gouda is still known even today as an archetypically orthodox region. It is part of the religiously mixed zone situated between the Roman Catholic south and the

liberal Protestant north. Around 1840, nearly 33% of Woerden's population was Catholic, almost 58% were members of the Dutch Reformed Church, 3% were Christian Reformed and nearly 5% were members of various smaller Protestant religious denominations. The Catholic proportion of the population rose during the first half of the nineteenth century and although many dissenters initially joined the ranks of the Christian Reformed who broke away from the Dutch Reformed Church from 1834 onwards, their numbers declined during the 1840s and 1850s. Following a long period of decline which persisted virtually throughout the nineteenth century, members of the Dutch Reformed Church were found to have maintained their presence reasonably well in Woerden during the period 1890-1930. The impact of the secessionist movement known as '*de Doleantie*', or the Dissent, which saw certain Protestants break away from the Dutch Reformed Church, was also much less pronounced in Woerden than elsewhere. From 1886 onwards, the Re-Reformed Church (*Gereformeerde Kerk*) took a considerable length of time to become established and membership did not peak until about 1930. Secularisation was barely in evidence in Woerden: in the 1930 census, as few as four percent of inhabitants claimed to have 'no religious affiliation' (in the province of Zuid-Holland the figure was more than sixteen percent). The fact that the secessionist movement took a long time to gain ground, and the disinclination of Woerden's inhabitants to embrace secularisation, suggests a strong bond between the local churchgoing public and the mainstream Dutch Reformed Church.

And so although Woerden was in the grips of change around the turn of the century, it was a change which in certain areas signified a return to former traditions. In a period during which most towns were witnessing a process of industrialisation and secularisation, this provincial town was characterised by agriculturalisation and orthodoxy. Clay was superseded by cheese as the key economic force and this changeover brought with it a shift towards cultural traditionalism. Even the Dutch Reformed Church was able to strengthen its position, despite the fact that the churches created as a result of the two secessionist movements - the Christian Reformed Church and the Re-Reformed Church - developed over time into formidable rivals for the religious allegiance of the population.

### 3. Data Sources

When seeking to examine the issue of who married who, one's initial inclination would be to compare the occupation of the bridegroom with that of the bride. This, however, is not feasible, for two reasons. Firstly, during the nineteenth century and well into this century, the marriage certificates of the majority of brides stated that they had no occupation - this was partly because they stopped working as soon as they got married but also because many



officials would have been inclined to record married women as having 'no occupation'. Secondly, there was very little correspondence between male and female occupations, not least because of the limited range of female occupations. We therefore used information on the occupations of the fathers of both the bride and groom. The added advantage of this is that it was often fathers who had the final say when it came to their offspring's choice of spouse.

Our main source of information for the study of the town of Woerden were marriage certificates covering the period from 1826 to 1930. The certificates contained information about date of marriage, age, occupation and marital status of the bride and groom and occupation of the parents of both spouses. We only examined marriages between spouses who married for the first time in view of the fact that age differences between spouses in second and later marriages are much larger. A total of 2980 certificates were studied.

A drawback of most historical studies on occupational or age homogamy based on marriage certificates is that no information is available about the occupation of the substantial number of fathers of the bride or the groom who were no longer alive by the time their offspring got married. It has been demonstrated that this lack of information can lead to a biased representation of the degree of social mobility (Van Poppel, De Jong and Liefbroer, in press). In view of this drawback, we tried to trace the occupations of deceased fathers from other sources. Our main source of information were death certificates since these documents state the occupation of the deceased. Information about the occupation of deceased fathers was also taken from the registers of the *personele omslag*, or personal tax (1826 - 1849) and registers of the *hoofdelijke omslag*, or local income tax (1849-1910).<sup>1</sup> Finally, census records and population registers were consulted. The first census we used was held in 1829, which was the first in a series of censuses held every ten years. Plans were to use the census data to draw up population registers, but the authorities did not

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<sup>1</sup> Personal taxes were levied with reference to rental value, doors and windows, fireplace, furniture, servants and horses (Klep, Lansink and Mulken, 1987, 7-9). Following the enforcement of municipal legislation in this area on 29 June 1851, local income taxes were levied on the basis of 'principles which could be considered a reasonable measure of the income of taxpayers', but the practical application of this system proved to be difficult. By the end of the nineteenth century, local income taxes were usually levied on a person's estimated income rather than on the presumed income determined on the basis of exterior criteria. The tax registers contained the following information: name, occupation, address, category in which the taxpayer had been classified on the basis of local legislation, and the amount of tax due. It is difficult to find out exactly how the presumed estimated incomes were determined. On the whole, the bye-laws regarding taxation made certain stipulations; these stipulations became more explicit towards the end of the century. It must be kept in mind, however, that large population groups were not taxed and thus not included in the tax registers. The land registers and population registers often indicate who was not taxed and who did not receive a tax assessment, for whatever reason.

make this mandatory. The records of the censuses held in 1829 and 1839 contain information about, among other things, the occupation and religious denomination of the population of Woerden. The 1849 Census was used to draw up population registers, as required by law from 1 January 1850 onwards. Some municipalities, including Woerden, kept population registers prior to this date. The first register for Woerden dates from 1840. These documents contained census data and changes therein. For each address, the register recorded particulars about the main occupant as well as his or her family members and other occupants. The particulars included their name, sex, place of birth, religious affiliation, marital status, occupation, relation to the head of family, date of marriage, date of arrival and departure - where applicable - and date of death. New registers were drawn up following each census. This unwieldy administrative system was abolished in 1920 and replaced by a system of loose cards, so-called family cards, which contained the same personal particulars as the registers. These sources of information provided additional data on the occupations of 313 deceased fathers of bridegrooms and 440 deceased fathers of brides - this difference may be explained by the fact that couples generally got married in the bride's home town. Finally, information about the religion of brides and grooms were also taken from census records and population registers.

For the purpose of studying trends in homogamy, the period between 1826 and 1930 has been divided into four subperiods. This classification was based primarily on economic developments, using trends in Gross National Product of the Netherlands (Van Zanden, personal communication). The period 1826-1865 was characterised by stability; the period 1866-1885 was a time of rapid growth of the GNP; the years 1866-1910 were again a relatively stable period, whereas the years after 1910 were marked by growth. This classification runs more or less parallel to the various phases in the process of religious and socio-political segregation - *verzuiling* - which gained ground in the years 1886 to 1910 and which reached its peak in the years after 1910. Table 1 gives the number of marriages analysed, classified by the period in which the marriage took place.

**Table 1: Distribution of first marriages, by period**

<b>Period</b>	<b>Number of marriages</b>	<b>Percentage</b>
<b>1826-1865</b>	<b>880</b>	<b>29.5</b>
<b>1866-1885</b>	<b>507</b>	<b>17.0</b>
<b>1886-1910</b>	<b>734</b>	<b>24.6</b>
<b>1911-1930</b>	<b>859</b>	<b>28.8</b>
<b>Total</b>	<b>2980</b>	<b>100.0</b>

## 4. Methods

We shall first discuss social class differences between spouses. We shall then deal with age differences between spouses and conclude with a section on religious homogamy. Each section will begin with a description of the distribution of marriages by social class, age and religious denomination, followed by a presentation of the results of log-linear analyses. A simultaneous statistical analysis of all factors which play a part when choosing a partner - social class, age and religion - would do justice to the possible interrelationship between these variables, but an analysis of this kind is not possible because of limitations of the available data. The number of observations for each combination of factors would be too small. We shall therefore restrict our study to an analysis of changes over time for each of the three homogamy elements in isolation as well as to an analysis of differences in age and religious homogamy by social class.

There are three reasons why log-linear models are used. First of all, social class and religious denomination are nominal variables and log-linear analysis is a method of analysis geared especially to the statistical analysis of nominal variables. The same method was applied to age differences between spouses to ensure consistency in the method used. Research has shown that this element of nuptiality can also be satisfactorily analysed with models of this kind (Van Poppel et al., in press). Secondly, log-linear analyses allow researchers to determine the extent to which changes in the degree of homogamy between spouses - for example, marriages between spouses with an upper class and working class background - are a result of the fact that society is changing - the number of skilled labourers is increasing - or rather a result of the fact that certain heterogamous combinations of spouses are becoming more common - the tendency for people from the upper classes to marry working class people is actually increasing. A third reason why we have opted for log-linear analyses is that there is a long-standing tradition to apply models of this kind when analysing the characteristics of spouses. There is thus a wide range of existing models which we can use to answer our research questions. To facilitate the presentation of our results, technical details on the estimated log-linear models are given in footnotes.<sup>2</sup>

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<sup>2</sup> All models are fitted with the software package LEM 0.11 (Vermunt, 1993).

## 5. Results

### 5.1 Social class homogamy

The social class to which the bridegroom and the fathers of the bride and groom belong was coded on the basis of a classification of the class structure of Dutch society around 1850 developed by Giele and Van Oenen (1976). This classification was made on the basis of the views of contemporaries on the hierarchy of their own society as well as on theories of social stratification. A central premise of Giele and Van Oenen's classification is that a classification of social classes should take account of the ownership of property by the people concerned, in particular their position in the production process. Giele and Van Oenen distinguish six classes: Upper class, petty bourgeoisie, civil servants, farmers, skilled labourers and unskilled labourers.<sup>3</sup> The upper class includes nobility, high-ranking government officials, scholars, bankers and wealthy merchants. Shopkeepers, independent craftsmen and millers are ranked under the petty bourgeoisie. The category of skilled labourers includes skilled manual workers and domestic servants. Unskilled labourers includes contract workers, agricultural workers and lower-ranking soldiers. As shown in Table 2, the petty bourgeoisie, skilled labourers and unskilled labourers constituted the largest categories in the class structure of Woerden during this period.

**Table 2: Distribution of bridegrooms by social class**

	<b>Absolute number</b>	<b>Percentage</b>
<b>Upper class</b>	<b>100</b>	<b>3.4</b>
<b>Petty bourgeoisie</b>	<b>693</b>	<b>23.7</b>
<b>Civil servants</b>	<b>271</b>	<b>9.3</b>
<b>Farmers</b>	<b>235</b>	<b>8.0</b>
<b>Skilled labourers</b>	<b>805</b>	<b>27.5</b>
<b>Unskilled labourers</b>	<b>820</b>	<b>28.0</b>
<b>Total</b>	<b>2924</b>	<b>100.0</b>

There are two ways to determine the frequency of people from different social classes to intermarry: by comparing the social class of the bride's father with that of the groom's father, or by comparing the social class of the bride's

<sup>3</sup> Data on occupation were also analysed with the aid of a classification of occupations based on their social prestige, based on the work of Van Tulder (1962). The outcome of this analysis largely confirms the results obtained on the basis of Giele and Van Oenen's classification. To save space, we shall here restrict ourselves to the results obtained by using Giele and Van Oenen's classification since their classification is usually used for historical purposes.

father with that of the groom himself. We have opted for the first possibility for two reasons. First of all, a comparison of the social class of the bride's father with that of the bridegroom 'mixes' marriage mobility with intergenerational mobility (Van Bavel, Peeters and Matthijs, in press). Secondly, the occupation of the bride's father is usually recorded at a later stage in his life than the occupation of the groom. This difference is substantially smaller when comparing the occupations of the fathers of both spouses.

Absolute figures of the number of intermarriages between children of parents from different social classes are not very meaningful since they do not take into account the size of the social class in question. We therefore used a relative figure to compare the frequency of intermarriage between members of different social classes, namely the ratio between the actual number of marriages contracted and the number of marriages that would have been expected if the choice of the partner is independent of social class and given the distribution of marriages across social classes.<sup>4</sup> These ratios are given in Table 3. If the number of marriages is equal to the number of expected marriages the ratio is 1; if the number of marriages is lower than expected, the ratio is smaller than 1, and if the number of marriages is larger than expected the ratio is bigger than 1. It is generally expected that the ratios will be approximately equal to 1 in an entirely open society. In a closed society, where intermarriage between different classes is a rare phenomenon, the ratios for marriages between members of the same class are much higher than 1 and the ratios for spouses from different social strata are much lower than 1.

A number of interesting findings are shown in Table 3. First of all, many of the ratios are not roughly equal to one; some are much higher, others are substantially lower. Marriage between members of the same social class are much more common than one would expect on the basis of non-assortive mating, in particular among the upper classes - 19 times more frequent than expected - and among farmers - five times more than expected. Intermarriage between social classes at opposite ends of the social spectrum, such as between members of the upper classes and skilled labourers, is a relatively rare phenomenon.<sup>5</sup> A second interesting finding is that the frequency with which farmers marry members of all other classes is lower than expected. Thirdly, intermarriage among the petty bourgeoisie, civil servants and skilled labourers is relatively high. Members of the petty bourgeoisie and civil servants tend to intermarry relatively often, as do the children of civil servants and skilled labourers. This could possibly be attributed to the fact that these social classes include a large variety of people from different segments of the labour force.

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<sup>4</sup> In more technical terms, the ratio between the number of marriages observed per cell is divided by the number of expected marriages according to the model of independence.

<sup>5</sup> There were no cases of intermarriage between members of the upper class and unskilled labourers.

**Table 3: Ratio between the actual number of marriages contracted and the expected number of marriages within and between different social classes.**

**Father Bride**

	Upper class	Petty bourgeoisie	Civil servants	Farmers	Skilled labourers	Unskilled labourers
<b>Father Bridegroom</b>						
Upper class	19.1	1.0	1.2	0.8	0.5	0.0
Petty bourgeoisie	1.2	1.6	1.4	0.6	0.9	0.7
Civil servants	1.7	1.3	1.9	0.6	1.4	0.5
Farmers	0.2	0.6	0.5	4.6	0.7	0.5
Skilled labourers	0.5	1.0	1.4	0.5	1.6	0.8
Unskilled labourers	0.0	0.6	0.4	0.5	0.7	1.7

A log-linear analysis was then carried out to determine the degree of social class homogamy more accurately, using so-called association models, designed by Goodman (1979; see also Hout, 1983; Van Leeuwen and Maas, 1991). The central assumption underlying these models is that the probability of marrying depends on (a) the distance between the social classes - the bigger the distance, the smaller the probability that intermarriage will take place - and (b) a general tendency to marry within one's own social class or with a member of an adjacent class - the bigger the so-called uniform association parameter, the stronger the tendency to marry someone with a similar social background. Since the probability of marrying someone of one's own social class tends to be underestimated in these models, a third kind of parameter is often added. This so-called immobility parameter expresses the tendency to marry within one's own social class. The higher this parameter, the stronger the tendency to marry within one's own social class.<sup>6</sup>

The results of the analysis show that an association model with two immobility parameters - one for farmers and one for all other social classes - produces a model with a good fit ( $L^2=5.7$ ,  $df=18$ ,  $p=0.62$ ). Table 4 gives the parameters for this model. These parameters have to be interpreted in relative terms. A positive uniform association parameter indicates that if the bride's

<sup>6</sup> The model used can be represented as follows (cf Van Poppel, Liefbroer and Post, in press):

$$\log F_{ij} = \alpha + \beta_i^{\text{Groom}} + \beta_j^{\text{Bride}} + \phi \mu_i \nu_j + \delta_i;$$

where  $F_{ij}$  is the frequency of a certain combination of social classes of spouses,  $\alpha$  is the general association parameter, and  $\mu_j$  are the distances between the social class scales, and the following restrictions apply:  $\mu_i = \nu_j$ , and  $\delta_i = 0$  when  $i \neq j$ .

**Table 4: Parameters for an association model to explain social class differences in nuptiality**

<b>Parameter</b>	<b>Strength</b>
<b>Uniform association parameter</b>	<b>0.71</b>
<b>Distance parameters between social classes</b>	
Upper class	-1.94
Petty bourgeoisie	0.04
Civil servants	-0.25
Farmers	0.41
Skilled labourers	0.39
Unskilled labourers	1.36
<b>Immobility parameters</b>	
Farmers	3.16
All other social classes	0.37

father belongs to a 'high' social class, the groom's father also tends to belong to a 'high' social class. The social distance parameters indicate that the differences between the petty bourgeoisie, civil servants, farmers and skilled labourers were not very big. Their parameters are all relatively close to one another - the biggest difference is 0.67 between civil servants and farmers. The distance between these classes and the upper class is considerable, however - smallest difference: 1.59. The same goes for the distance between these classes and unskilled labourers - smallest difference: 0.95. This shows that in the nineteenth century the upper class was unmistakably at the top of the social hierarchy, and that unskilled labourers clearly occupied the lowest ranks of the social spectrum. Social differences between the other social classes were not as marked. The positive immobility parameters show that it was most common for members of all social classes to marry within their own class. Having said that, this trend was particularly marked among farmers, as shown by the extremely high immobility parameter. Farmers were found to have a very strong tendency to marry members of their own social class.

One possible explanation for the differences in marriage trends between different social classes are the income differences between the various classes. Members of certain classes, such as civil servants, the petty bourgeoisie and skilled labourers may tend to intermarry since members of these classes often have a similar income. We are unable to perform a strict test of this assumption, but we are able to make a rough estimate of incomes per social class on the basis of wealth and income tax assessments.<sup>7</sup> In the period 1891-1910 the

<sup>7</sup> People were divided into income groups for the purpose of levying income tax, for

income of upper class people was by far the highest (NLG 1969 per year), followed by that of farmers (NLG 1171), civil servants (NLG 641), the petty bourgeoisie (NLG 632), skilled labourers (NLG 495) and unskilled labourers (NLG 326).<sup>8</sup> Income levels among civil servants were practically the same as those found among the petty bourgeoisie; the difference in income levels between these two classes on the one hand and the category of skilled labourers on the other hand was also small. In light of the above, we may assume that the choice of spouse at least partly depends on the income level of the bride's and/or groom's family. This assumption does not hold for farmers whose actual marriage patterns do not reflect the fact that their income levels lie somewhere between those of the upper class and the petty bourgeoisie, indicating once again that farmers formed a closely knit group whose members tended to marry within their own class. Another reason why the farming class forms an exception to the assumption made above is that the social status of farmers' sons and/or daughters who did not inherit the farm was much lower than their fathers' income suggests because they did not inherit the means of production enabling them to achieve the same level of income as their fathers.

In the above analysis, the occupation of the bride's father is compared with that of the groom's father. Another factor which sheds light on the social structure of 19<sup>th</sup>-century Woerden is the relative importance attached to the father's occupation compared with the occupation of the groom himself when choosing a spouse. Where the occupation of the father of the groom is given more weight, the society in question attaches paramount importance to 'ascription'; where the groom's occupation is given more weight, the society in question is more 'achievement'-oriented. An analysis of a cross-classification table giving the occupation of the bride's father, the occupation of the groom's father *and* the occupation of the bridegroom himself - using the same kinds of models as the ones cited in the foregoing - shows that both the occupation of the groom's father and that of the groom himself are found to be important, but that the occupation of the bridegroom himself is more closely associated with that of the bride's father - the uniform association parameter for the relationship between the occupation of the bride's father and the occupation of the groom's father is 0.28, whereas the same parameter for the interrelationship between the occupation of the bride's father and that of the bridegroom himself amounts to 0.73 ( $L^2=168.0$ ,  $df=187$ ,  $p=0.84$ ). Therefore, the bride's family seemed to attach greater importance to the social status of the bridegroom himself than to the status of his parents when it came to choosing a spouse for their daughter.

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example an income group from NLG 400 to NLG 500. Since most incomes lie at the lower end of each class, the income in each income group was fixed at 1/3 of the class interval - in the example given this would be NLG 433.

<sup>8</sup> Almost the same pattern was found for the period 1849-1860 except that the absolute income levels were much lower.



Lastly, we studied the degree to which homogamy between the social classes of the spouses' fathers has changed over time. As mentioned, we distinguished four periods: 1826-1865, 1866-1885, 1886-1910 and 1911-1930. A model in which the distances between the social classes and the immobility parameters do not change over time, but in which the uniform association parameter decreases over time, fits the data well ( $L^2=75.7$ ;  $df=90$ ;  $p=0.86$ ).<sup>9</sup> The uniform association parameter dropped from 0.84 in the period 1826-1865, to 0.67 between 1866 and 1885, 0.62 in the years 1886 to 1910, down to a level of 0.46 in the period 1911-1930. A lower uniform association parameter implies that there is a weaker connection between the occupational classes of both parents, indicating that there was a growing tendency to marry someone from another social class between 1865 and 1885, and again after 1910. In other words, the barriers between social classes lowered during the course of the nineteenth and early twentieth centuries.

## 5.2 Age homogamy

On the whole, age differences between spouses were considerable. As shown in Figure 1, marriages between older men and younger women were a particularly common phenomenon. For example, in no less than a quarter of all marriages the husband was between four and eight years older than his wife, and in ten percent of the marriages the husband was even nine years older, or more. Having said that, marriages in which the wife was at least four years older than her husband were also relatively common.

Once again, we used log-linear models to analyse the degree of age-homogamy between the spouses. However, the type of model used is slightly different from the models used to analyse social class differences. Use was made of diagonal models, applied by Kalmijn (1991a) to analyse educational and religious homogamy between spouses. Spouses are divided into five-year age groups; the resulting cross-classification table is subsequently taken as the basis for the analysis. In our analysis we assumed that marriages between men and women who belong to the same five-year age group are more common than marriages between men and women who are one five-year age group apart, that marriages between men and women who are one five-year age group apart are more common than marriages between men and women who are two age groups apart, etc. If this model is an accurate representation of the actual age differences between spouses, the diagonal

<sup>9</sup> The model used can be represented as follows (cf Xie, 1992):

$$\log F_{ijk} = \alpha + \beta_i^{\text{Groom}} + \beta_j^{\text{Bride}} + \beta_k^{\text{Period}} + \beta_{ik}^{\text{GrPer}} + \beta_{jk}^{\text{BrPer}} + \varphi_k^{\text{Per}} \mu_i v_j + \delta_i;$$

where  $F_{ij}$  is the frequency of a certain combination of social classes of spouses,  $\Sigma \beta_i = \Sigma \beta_j = \Sigma \beta_k = \Sigma \beta_{ik} = \Sigma \beta_{jk} = 0$ ,  $\varphi_k^{\text{Per}}$  is the period-specific association parameter,  $\mu_i$  and  $v_j$  are the distances between the social class scales, and the following restrictions apply:  $\mu_i = v_j$ , and  $\delta_i = 0$  when  $i \neq j$ .

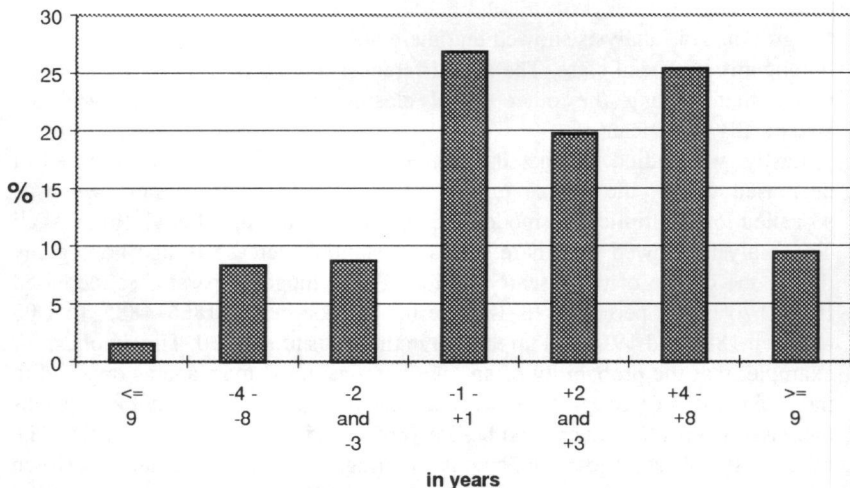


Figure 1: Difference in age at marriage between spouses

parameters should decrease as the distance between the age groups increases.<sup>10</sup>

The model just described fits the general relationship between the age at marriage of the bride and groom during the course of the entire period studied quite well ( $L^2=23.9$ ,  $df=20$ ,  $p=0.25$ ). The estimated diagonal parameters show that the probability of marriage decreased as the age difference increased, as expected; the parameter is -0.35 for a difference of one age group, -1.21 for a difference of two age groups, -2.53 for a difference of three age groups, -3.73 for a difference of four age groups and -4.25 for a difference of five age groups. These parameters imply, for example, that the average probability that two 21 to 25-year-olds will marry each other is twice as large as the probability that a 21 to 25-year-old will marry a 26 to 30-year-old, and that the probability that two 21 to 25-year-olds will marry each other is more than eleven times as large as the probability that a 21 to 25-year-old will marry a 31 to 35-year-old.

We then studied the degree to which the age-differences between spouses varied depending on their social class. For this purpose we analysed a cross-classification table giving the ages of the spouses and the social class of

<sup>10</sup>The model used can be represented as follows (cf Kalmijn, 1991):

$$\log F_{ij} = \alpha + \beta_i^{Groom} + \beta_j^{Bride} - \frac{1}{2} \delta_{ij}^{Groom}$$

where  $F_{ij}$  is the frequency of a certain combination of age groups of spouses,  $\sum \beta_i = \sum \beta_j = 0$ ,  $\delta_{ij} = \delta_{ji}$  when  $i \neq j$  and  $\delta_{ii} = 0$  when  $i=j$ .  $\text{Exp}(\delta_{ij})$  gives the so-called odds ratio which gives the probability ratio between the probability that a bride and a groom aged  $i$  will marry each other and the probability that a bride or groom aged  $i$  will marry a bride or groom aged  $j$ .

the groom. This analysis showed that there are no significant differences in age homogamy by social class. The age differences among farmers appeared to be larger than among the other social classes, but the difference was not statistically significant.

Lastly, we studied whether the degree of age homogamy had increased or decreased during the course of the research period. Once again, we used so-called log-multiplicative models as applied by Van Poppel et al. (in press).<sup>11</sup> The analysis showed that there was a substantial increase in age homogamy during the course of the research period. The homogamy parameter increased from 0.76 in the period 1826-1865 to 0.94 in the period 1866-1885, to 1.08 between 1886 and 1910 and up to 1.30 in the years after 1910. This implies, for example, that the probability of an 'age-homogamous' marriage as opposed to the probability of a marriage between a bride and groom in adjacent age groups increased from 1.7 in the period before 1865 to 2.5 in the years after 1910. The probability of an age-homogamous marriage versus a marriage between partners who are two age groups apart increased from 6.2 in the earliest period to 23.2 in the most recent period. We may therefore conclude that there was a clear trend towards greater age homogamy between spouses during the course of the research period.

### 5.3 Religious homogamy

The religious make-up of the population of Woerden was very diverse. Among its inhabitants was a substantial contingent of Roman Catholics as well as members of various Protestant denominations. Unfortunately, we have not been able to make a satisfactory distinction between the Dutch Reformed Church, Secessionists and various Calvinist factions on the basis of the population register and census records since the names given to the different religious denominations varied from census to census. That is why we have grouped members of the various Calvinist denominations together. As a result, we have not been able to study the possible consequences of the segregation process between the different Calvinist factions within Protestantism.

Analogous to Table 3, Table 5 gives the ratio between the actual number of marriages contracted and the expected number of marriages between partners from different religious denominations. We compared three religious denominations, namely Roman Catholics, Calvinists and Lutherans. The data show that in each of these communities there was a very strong tendency to marry someone with the same religious affiliation. At the same time, we see that the barriers between Calvinists and Lutherans were considerably lower

<sup>11</sup> The model used can be represented as follows (cf Xie, 1992):

$$\log F_{ijk} = \alpha + \beta_i^{\text{Groom}} + \beta_j^{\text{Bride}} + \beta_k^{\text{Period}} + \beta_{jk}^{\text{GrPer}} + \beta_{jk}^{\text{BrPer}} - \psi_k^{\text{Per}}(1/2\delta_{ij}^{\text{GrBr}}),$$

where  $F_{ij}$  is the frequency of a certain combination of age groups of spouses,  $\Sigma \beta_i = \Sigma \beta_j = \Sigma \beta_k = \Sigma \beta_{ik} = \Sigma \beta_{jk} = 0$ ,  $\delta_{ij} = \delta_{ji}$  when  $i \neq j$  and  $\delta_{ij} = 0$  when  $i=j$ .

**Table 5: Ratio between the actual number of marriages contracted and the expected number of marriages within and between various religious denominations**

<b>Religion Bride</b>	<b>Religion Bridegroom</b>		
	<b>Roman Catholic</b>	<b>Calvinist</b>	<b>Lutheran</b>
<b>Roman Catholic</b>	<b>2.5</b>	<b>0.2</b>	<b>0.3</b>
<b>Calvinist</b>	<b>0.1</b>	<b>1.5</b>	<b>1.0</b>
<b>Lutheran</b>	<b>0.3</b>	<b>0.9</b>	<b>14.5</b>

than those between the two Protestant groups on the one hand and the Catholics on the other. Inter-marriage between Protestants and Catholics was a very rare phenomenon.<sup>12</sup>

Next, a log-linear analysis was carried out using Kalmijn's model for his analysis of religious homogamy in the United States. The analysis showed that it was very unusual for Protestants and Catholics to intermarry during the period studied. The ratio between the probability of a religiously homogamous marriage and a religiously heterogamous marriage was 143:1. Kalmijn (1991a) found an odds ratio of about 50 for American marriage cohorts in the 1920's.

We then studied whether there were significant differences between social classes in the tendency to enter into religiously homogamous marriages. Our analysis showed that this was, indeed, the case. A model which makes a distinction between the upper class, skilled labourers and unskilled labourers on the one hand, and the petty bourgeoisie, civil servants and farmers on the other hand shows that intermarriage is more common among the former than among the latter ( $L^2=1.01$ ,  $df=4$ ,  $p=0.91$ ). The odds ratio for the former is 98; for the latter the ratio is 351. Apparently, both the elite and the proletariat had less of a problem crossing religious barriers than the middle classes in the town of Woerden.

Lastly, we studied how religious homogamy developed over time. The data seem to indicate that there was a gradual increase in the degree of religious homogamy during the course of the period in question. However, a model in which a clear-cut break was found around 1885 also has a good fit ( $L^2=0.38$ ,  $df=2$ ,  $p=0.83$ ). The model showing a gradual increase in religious homogamy gives the following ratio between religiously homogamous and religiously mixed marriages: from 60 in the period 1826 to 1865, to 110 in the period 1866

<sup>12</sup> There was a relatively small Jewish community in Woerden. Religiously mixed marriages were very rare within this community. No more than one out of a total of 16 marriages which involved Jewish spouses during the research period was contracted between a Jewish and a non-Jewish person - a Dutch Reformed groom and a Jewish bride.

to 1885, 237 in the years between 1886 and 1910 and up to 300 in the years after 1910. Here, too, it is clear that the rise in religious homogamy was particularly strong after 1885, the period in which the segregation of Dutch society really gained momentum.

## 5. Conclusion

This study traced changes in the social structure of the Dutch town of Woerden with the aid of information on marital homogamy. The analysis shows that the 19<sup>th</sup> and early 20<sup>th</sup> centuries were marked by important social changes. At the beginning of our research period, Woerden was without a doubt a class society. Inter-marriage between members of different social classes was a rare phenomenon, particularly at the top and the bottom of the social ladder: the elite and unskilled labourers tended to marry within their own class. Among farmers' sons who did not leave the agricultural sector, socially mixed marriages were even less common. Those who did marry someone from another class usually tied the knot with a member of the middle classes. The middle classes also tended to marry members of their own group. However, the tendency to marry within one's own social class declined during the course of the 19<sup>th</sup> century, indicating a shift towards a more open society, at least as far as social class was concerned.

Another development reflecting the impact of the modernisation process on the town of Woerden was the decrease in age differences between spouses. Age homogamy increased during the course of our research period. It became more and more common for men and women to choose a spouse of more or less the same age. This, too, indicates that the preferences of the bride and groom themselves, rather than the preferences of their parents, were decisive when it came to choosing a spouse. Shorter's (1975) 'romantic' marriage model became more important during the course of the research period.

In view of the fact that the economic development of Woerden was marked by stagnation or even by de-industrialisation, it is quite surprising that the town's marriage patterns underwent a process of modernisation. Industrialisation was not found to be a precondition for the development of a society in which people attach growing importance to individual autonomy. It may well be that general economic development and the impact of ideological developments which took place in larger cultural and industrial centres played an important part in the modernisation of marriage patterns in Woerden.

Differences between the various religious denominations in Woerden even seem to have been intensified during the course of the period studied. The process of religious and socio-political segregation was found to have left its mark on society. The religious barriers which existed in the town of Woerden during the first decades of the nineteenth century were considerable by modern

standards - although they were no higher than those in the United States in the early 20<sup>th</sup> century - and became ever more insurmountable over time. From 1886 onwards - the period during which the process of segregation manifested itself as an institutional model - mixed marriages formed an exception. Where religiously mixed marriages did exist, they were found only among the upper class and working classes. It may well be that economic considerations played such an important role among the former that they could afford to flout religious and social values; among the working classes there was not a strong link between economic interests and religion. Leenders (1992), for example, suggests that religion played a less significant role in the daily lives of the lower classes than among the middle and upper classes where it had a strong influence on people's attitudes and behaviour. Among the middle classes in particular leading a religiously correct life had significant economic and social ramifications.

To summarise, our research revealed that there was not a clear-cut shift towards greater freedom in terms of the spouses people chose. The decrease in social class homogamy and the increase in age homogamy - both of which are indicative of a greater freedom of choice when it came to choosing a spouse - were found to go hand in hand with an increase in religious homogamy - indicative of a society in the ever-tightening grip of religion. Research into the modernisation of Dutch society should pay more attention to conflicting trends of this kind. It is clear that a linear development model is too simple a representation of the developments which actually took place.

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