Finding the Right Partner
Rural Homogamy in Nineteenth-century Sweden*

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Abstract

Choosing a marriage partner was a crucial process in pre-industrial society, especially for the landowning classes. This study focuses on social aspects of mate selection in five rural parishes in southern Sweden between 1829 and 1894. We use an individual level database containing information on a large number of marriages and the social origin of the marrying couple, regardless of whether they were born in the parish or not. The data makes it possible to study homogamy, without introducing possible selection biases by only studying the non-migrating population, which is of considerable importance in a society characterized by very high levels of geographical mobility. The results show a community characterized by quite strong homogamy, but also with pronounced differences in homogamy between social groups. Landholding peasants were most homogamous, while the semi-landless were least homogamous. The pattern of homogamy also remained fairly constant over time despite fundamental economic and social change.

Introduction

In pre-industrial Western Europe the economic aspects of marriage were of great importance. In areas dominated by the Western European Marriage Pattern, marriage was closely connected to family and household formation.[1] In order to marry, a young couple needed a secure income and housing to be able to set up an independent household. To peasants access to land was vital, and marriage was often intimately connected to inter-generational land transmission. This made the choice of marriage partner a crucial issue, in which a lot more than love and affection was involved.[2] In addition to this important financial aspect, marriage was also a way to link lineages. Kinship alliances could be an important motive for marriage in itself, or could be used as an instrument to find a socially and financially suitable partner in the marriage market.[3] In this way marriage strategies were closely linked to more general family strategies regarding social reproduction, where marriage was intimately connected to issues of inheritance, land transmission, migration decisions, etc.[4]

The aim of this paper is to analyse social homogamy in a rural area of southern Sweden in the nineteenth century (1829–1894). Our point of departure is the claim of ethnologists and local historians that pre-industrial rural society was characterized by rather strong homogamy. Although such claims make sense in light of what was just said, they are mainly based on qualitative sources or individual examples, showing the *occurrence* of positive assortative mating (people with similar characteristics marrying each other), not its *frequency*. The approach in this study is to confront the picture given by ethnologists and local historians with demographic data, and to undertake a quantitative analysis of the frequency of homogamy. More specifically we ask if there was a tendency of homogamy in rural areas of southern Sweden in the nineteenth century, and if it was similar across social groups and over time?

In order to answer such questions we make use of a high quality dataset based on family reconstitutions of five rural parishes in the province of Scania in southern Sweden. By

following all individuals observed living as married in one of these parishes in the period 1829–1894 back to their place of birth, we get the opportunity to study social homogamy without introducing possible selection biases stemming from migration, which are otherwise common in family reconstitution studies.

Background

If marriage was just an act of love and the mate selection process was not restricted by institutions along social, religious or ethnic lines or by geographic distance, the mix of mates into couples would be rather haphazard. For many reasons we know that this is not the way marriage worked in old times, and not even today. Therefore, theories have been developed in order to explain individuals' assortative behaviour in the marriage market.

One line of argument is that mate selection aims at pooling wealth and status from two houses into a third, new union.[5] Certain marriage strategies are developed in order to maximize the outcome of such unions, depending on the social, religious or ethnic origin of the spouses. For financial reasons, and of fear for punishment from the family and the social, religious or ethnic group, young people prefer a spouse with similar economic characteristics in accordance with the saying "birds of a feather flock together".

In economic theories of marriage the gender division of labour, the productivity (wage) of men and women in different tasks, and the effects of different time allocations on aggregate output in household production, largely determine the assortative mating process, i.e. whether spouses have similar (positive assortative mating) or different (negative assortative mating) characteristics.[6] In a pre-industrial rural context, however, the mating process does not have so much to do with division of labour as with assets, mainly access to land and housing. Regardless of whether spouses were similar in terms of assets or not they were always specializing in different work tasks according to the gender based division of labour,[7] which

implies that gains to specialization is not what differs between different marriage matches. Instead, strategies that aim at maintaining family estates and securing a viable landholding and social reproduction were at the centre of the marriage decision, at least for the landed groups.

In nineteenth century southern Sweden people were homogeneous as far as religion and ethnicity were concerned, but socially divided. There were many institutions in rural society, some of which were connected to marriage, which make it reasonable to believe that certain marriage strategies were practiced, especially among landholding peasants. For example, we know that peasant couples developed different techniques to modify the principal of the inheritance legislation, which prescribed quite equal inheritance between all children.[8] In Scania, the most common way seems to have been to transfer the family farm to a chosen child, often the eldest son, while the parents (or at least one of them) were still alive, in exchange for house and boarding for the rest of their lives (the institution of peasant retirement).[9] However, it was not always the eldest son who became the new manager of the family farm, quite often it was a younger son or a daughter (in practice the son-in-law).[10] To choose the right one must have been a crucial decision for the ageing couple to make. Children who were not favoured in this respect were compensated in other ways, by parcels of land or movable property.[11]

It is easy to imagine that the marriage of children played an important role for the peasant couple planning for their own old age and the succession between generations. The splitting of land through inheritance could be compensated for by the right marriage set up. A successful union between one of the children and a similar wealthy party was a guarantee that the farm could maintain two households when the old couple retired. Besides the fact that they owned, and were in charge, of the family farm, the institution of marriage gave the ageing couple an important role in the mating process.

According to the marriage act of 1734, no one could be forced into marriage, and this applied to both men and women. On the other hand, the same act included provisions that gave parents the power to influence their children's choice of partner. Unmarried women had no authority and were placed under a guardian, normally the father, who acted on their behalf in marriage negotiations. The institution of guardian is a reflection of the fact that marriage was not only a matter for the young couple, but also dependent on the older generation, in particular in so far as the woman was concerned. The law also gave the parents the right to disinherit their unmarried daughters if they married against the will of the parents. Even sons and daughters who were widowed could, if they married against the will of their parents, be disinherited, given that they were part of the parents' household, because the refusal to obey would then be interpreted as disdain and contempt of their parents.[12]

Legislation thus made it possible for marriages based on love, but at the same time it made it possible for parents, by virtue of their involvement in the marriage negotiations and their right to disinherit children who did not obey, to influence the choice of marriage partner. Ethnological researchers have made attempts to obtain a picture of how this worked in practice, by studying contemporary accounts on the subject.

In the older ethnological literature, which mainly dealt with landed peasant customs, emphasis was laid on parental influence on children's marriages, and mention was even made of a 'parental-power marriage system'.[13] People were reluctant to see the homestead passed on to someone outside the family, and wanted instead to increase its size by fusion with another homestead, as a result of marriage. An advanced expression for this sort of economic planning in connection with marriage was, among other things, the so-called sibling-exchange system, in which two siblings of one family married two siblings of another.[14]

Contemporary sources often provide vivid accounts of parental power over the children's choice of marriage partner. As mentioned, it was mainly a matter of marriage strategies

among the wealthy farmers in southern and central Sweden. The contemporary narrators point out that these farmers endeavoured to marry off their children to their equals, that is to say, within the same social group. Wealth and social status were qualities that were decisive in the choice of marriage partner, not passion or love.[15] In 1847, Nicolovius, a pseudonym for the parson Nils Lovén, published a description of peasant customs experienced during his childhood at the turn of the century in the district of Skytt in southern Scania in which he stated:

"Similarity of wealth, but not the way of thinking or opinion, was the basis for marriage unions among farmers' families at the time. Beauty and grace were the least important in making their choice. These concepts did not even have corresponding words in the language of the farmers, and even now, when the word 'charming' is used, I hear of a charming horse and even a charming pig, but, so far, never a charming girl."[16]

Marriage is often presented by the contemporary narrators as a financial affair, even though it was not openly admitted, and the proposal as a negotiation in accordance with laid-down rules.[17] In 1976, Nils Bruzelius who was a headmaster in Ingelstad district in southern Scania published an account of local customs. On marriage he wrote: *"*In the marriage settlement the most important question was always, 'What will you give the girl?' More than one proposal came to an abrupt end at the mere question, because the father-in-law refused to hand over the oxen demanded by the son-in-law".[18]

The contemporary narrators compare the peasants' mode of conduct, when choosing a marriage partner for their children, with that of the higher social classes and their efforts to retain or extend the family property. Whenever these efforts came into conflict with the youngsters' love for someone other than the intended partner or a lack of affection for the

chosen one, the parents tried to impose their will and often succeeded. [19] If the opposition to the wish of their parents was too great from one of the marriage partners, it was possible, within the framework of the marriage agreement between the two families, to bring about a change so that a brother or sister was offered as a partner instead. However, fathers often forced their daughters to marry against their will. [20] Eva Wigström, a teacher and writer describing peasant customs in the district of Rönneberg in western Scania in the 1840s, reported: "Like Denmark has its legends about locked-up maidens, the Scanian rural people had theirs about girls who by force had to marry the men chosen for them by their parents and relatives."[21] Parents did not have the same jurisdiction to force their sons into marriage, and traditional material shows that there were instances when boys refused to follow their parents' directions and the parents had to yield.[22]

In addition to these parentally controlled marriages of convenience, there was always room also for marriages based solely on love and affection. In fact, the use of parental-power to influence the children's choice of marriage partners was most evident among the nobility, bourgeoisie and farmers, where children's marriages had an effect on the transfer of resources between generations, and the organization of security in old age for the parents.[23] Since the parents controlled the property, a threat of disinheritance had real significance. For the landless in the rural areas, the parents' influence on the children's choice of marriage was smaller.[24]

Contemporary accounts also show that parental influence on the children's marriage was greater in southern Sweden than in the northern parts of the country, and this, in turn, may have been due to differences in social structure. In the south, as mentioned, social differences were large and farmers with considerable land holdings gave their daughters large dowries, which is why they had reason to try and get their children to avoid marrying the 'wrong'

partner. In the north, the social structure was more egalitarian, which reduced the need for strong parental influence on the choice of marriage partner.[25]

As we have seen, ethnological studies based on traditional material emphasize that farmers tried to prevent their children from marrying someone from a landless background.[26] Even contemporary descriptions call attention to the fact that children of landed peasants usually married their equals.[27] During the latter half of the nineteenth century there was extensive growth of the landless groups. It has been shown that this growth was not due to higher fertility among the landless than among the landed, but to an increased social mobility downwards. It is probable that in this process there was an increase in the proportion of marriages between peasant and landless children. It can also be expected that marriages across social boundaries were more common in areas with early proletarianization, like, for example in western Scania. Considering that marrying down socially was strongly resisted by peasant children, the increased proletarianization of the rural areas should have resulted in the alternative strategy of remaining in the parental home and postponing marriage, or abstaining completely.[28]

Within sociological theories of modernization it is often believed that the nineteenth and early twentieth centuries brought fundamental changes to the mating patterns. Industrialization brought not only economic changes that reduced parental control over marriage through new employment opportunities for young people, but also a changing mentality implying an increased importance of "romantic love" in choosing a marriage partner.[29] As a result, it is argued that economic factors and family strategies became less important over the nineteenth century, and that this development ultimately led to increased heterogamy. Empirical studies, however, sometimes find it difficult to substantiate these modernization hypotheses.[30] Instead, the mating patterns, as well as the family system more

generally, seem to have been quite robust against the economic and social changes that followed industrialization.[31]

Area and data

The data used is based on family reconstitutions carried out within the Scanian Demographic Database[32] for five rural parishes in western Scania in southern Sweden: Hög, Kävlinge, Halmstad, Sireköpinge, and Kågeröd. They are located about 10 kilometres from the coast in the Western part of Scania, the southernmost province of Sweden (see map 1). The social structure of the parishes varied somewhat. Hög and Kävlinge were dominated by farmers on freehold and crown land with rather similar social characteristics, while tenant farmers on manorial land totally dominated the other three parishes.[33] Besides the peasant group, the parishes also hosted various landless and semi-landless groups, dependent on working for others to cover the subsistence needs of the family. In 1830, the five parishes had 3,978 inhabitants. By 1895 that figure had increased to 5,539: an average annual increase of 0.5 per cent during this 65-year period, which is a somewhat slower rate of growth than for Sweden as a whole during the same period, 0.8 per cent per year.[34]

-- Map 1 here

The family reconstitutions were carried out using data on births, marriages, and deaths, for the period from the late seventeenth century until 1894. The material is of high quality, with only a few years missing. The reconstitutions were carried out automatically using a computer program.[35] They have also been checked manually and linked to other sources, mainly the poll-tax registers (*mantalslängder*) and the catechetical examination registers (*husförhörslängder*). The database contains all individuals born in, or migrating into, the

parishes. Instead of sampling a certain stock of individuals, for example a birth cohort, each individual is followed from birth, or time of in-migration, to death, or out-migration.

Since this study deals with mating behaviour, we need information on the social background of both spouses in a given couple. In the period 1829–1894, 4,040 married couples were observed in the five parishes of investigation. From these we sample the couples for which the social origin of both husband and wife could be established.

One potential problem with family reconstitution studies is that migration may lead to a spreading of a family's demographic events in several different parishes. Depending on how we deal with this problem results derived from family reconstitution data may be biased in various ways.[36] In this study we are dependent on information about conditions in the parental home of individuals that lived as married in the parishes. Using traditional family reconstitution data would have forced us to limit the sample to couples where both the husband and wife were born in the same parish as they resided in as married. Due to very high rates of migration in this area[37] such an approach would likely suffer from selection bias, because the couples in the sample would have been selected among the non-migrants, who, most likely, would have been selected in terms of land holding, physical ability, etc.[38]

In order to avoid these kinds of problems, we have followed all married individuals in the parishes, regardless of whether their marriage took place in the parish of residence or in a different one, to their parish of birth and added information about social status (of the father) at birth. Information on occupation was taken from the birth records or, if available, the catechetical examination registers, and data on access to land or croft were taken from the poll-tax registers.[39] In this way we got information on the social origin of both husband and wife for the married couples in the parishes, without introducing too much selection bias stemming from migration. However, due to missing or wrong information about date and place of birth in the registers, we were not able to link data about the parental home to all

individuals in the sample. For about 30 per cent of the couples we lack information about the social origin of either the husband or the wife, or both. This leaves us with 2,724 couples for which we have data on the social background of both husband and wife.

-- Table 1 here

Table 1 shows these couples distributed by the spouses' social origin according to the classification of HISCLASS.[40] Since the area of investigation in this study is totally rural, for practical reasons some minor re-grouping within the HISCLASS framework has to be undertaken. Classes 1-5 ("managers and professionals") must be excluded from the analysis, since these groups are too small to be analysed by themselves, as is evident from table 1, and too different to be collapsed with any of the other groups.

In the present context "skilled workers" (classes 6-7) consists only of artisans, e.g. shoemakers, tailors, carpenters, etc. In a rural environment such as the parishes under study, artisans were not specialized skilled workers similar to urban artisans, for whom both education and establishment were controlled by the guilds.[41] They often worked for different peasants in the parish, rather than in their own workshops like the urban artisans; sometimes they even lived in the peasant households while doing the work. Usually they were not able to live from their trade alone, but had to work as a farm labourer to earn supplementary income, and in the sources the same person may well be recorded as a shoemaker one year and a landless worker another. Hence, these rural artisans are grouped together with the landless farm workers in the analysis.

The class of farmers (8) is divided into two subgroups depending on the type of property rights and land tenure. Class 8a consists of farmers on freehold and crown land that had at least enough land at their disposal so that they could provide for their family and pay

land rents or taxes.[42] Freeholders owned their land and paid land taxes, while crown tenants farmed land that belonged to the Crown and paid land rent. Although there were important differences between these groups, for example when it came to inheritance and subdivision of land[43], their situations were in many respects highly similar, especially if we compare with other social groups. Consequently, in this analysis they will be analysed together and hereafter be jointly referred to as farmers.[44]

Class 8b consists of tenant farmers on manorial land with holdings above subsistence level. They were part of a manorial system and their conditions differed in important respects, both socially and legally, from that of farmers on freehold and crown land. At least up to the 1860s they paid most of their rent as labour rent, working on the demesne. Often the exact amount of labour to be paid was not specified in contracts.[45] After the 1860s, however, the manorial system changed towards more specified contracts and less labour rent, making conditions between the different farming groups more similar. From contemporary descriptions, we also know that freeholders in the area generally looked down on the noble tenants, despite the fact that they often farmed land of equal size.[46]

Class 9, "lower skilled workers", consists of soldiers. The organisation of the Swedish military system meant that the local community put a cottage or croft with a small garden plot to the disposal of the soldier in exchange for military service. He was also given some payment, usually a combination of cash and benefits in kind. However, this wage was not sufficient, and consequently the soldier had to work as a labourer to earn some more. Moreover, being a soldier was by no means a full-time job. Usually a soldier only spent a couple of weeks, during low season in agriculture, with the military. The remainder of the year he spent at home, working in agriculture.[47] Accordingly, in the analysis the soldiers are also merged into the group of landless farm workers.

The class of farm workers (10 and 12) is also divided into two subgroups. The landless, contains farm workers without access to land, i.e. contract-workers (*statare*), day-labourers, servants and lodgers (10a and 12a). The semi-landless (10b and 12b), consists of occupational groups that often had access to some land. Here we find peasants with land below subsistence level as well as of cottagers *(gatehusmän)* and crofters *(torpare)*, who sometimes had landholdings equal to that of smallholding peasants, but other times had only small garden plots. Unfortunately it is impossible from the sources to distinguish between cottagers and crofters with and without arable land. This makes the semi-landless group somewhat heterogeneous, containing peasants and cottagers/crofters with land below subsistence level as well as some cottagers and crofters lacking arable land altogether. Finally, the group of unskilled (non-farm) labourers (11) is very small, which is only natural since the area under study was completely rural until the last decades of the nineteenth century.

Due to the small number of observations in some of these categories and due to the difficulty of distinguishing different occupations in the rural context both in the sources and in the actual work they performed, for example artisans and soldiers being farm labourers most of the time, a less detailed social categorization was chosen in order to arrive at meaningful interpretations of the patterns of homogamy. Four different groups will be analyzed: farmers on freehold and crown land (hereafter called farmers), tenants on manorial land (hereafter called tenants), semi-landless, and landless. The first two groups are identical to class 8a and 8b respectively, while the semi-landless group is the same as class 10a+12a. In the landless group classes 6, 7, 9, 10b, 11 and 12b are merged together.

In the Malthusian situation of eighteenth and early nineteenth century rural Sweden resources were scarce and consequently access to marriage varied between social groups. Since the social norm was that a marriage should result in the building of a separate household, a precondition to marriage was the access to a dwelling suitable for a family and a

safe income. Compared to youth of landless and semi-landless origin, the children of farmers and tenants were favoured in this respect, and they were generally younger when they married, about 30 for men and 27 for women.[48] Youth of non-peasant origin often had to work as servants for longer time and were on average one or two years older when they married. In the second half of the nineteenth century a substantial decrease in the mean age at first marriage of non-peasants occurred. For women this drop was two or three years and for men two years. The average marriage age of peasants did not change much though, and in the late nineteenth century the difference between social groups was small. One interpretation of the decrease in the mean age at first marriage of the non-peasant group is that it reflected the social transformation in the countryside. Population pressure and the commercialisation of agriculture may have given rise to new employment and housing forms for married people, such as crofters, cottagers and contract workers (*statare).* In this way, the access to marriage for landless people probably increased, and they could marry at younger ages.[49]

There were also differences between these social groups in terms of fertility. Farmers and tenants had the highest marital fertility above age 25 (5.7 and 5.6 children per woman, respectively), landless had the lowest (4.2), and the semi-landless took a middle position (5.2 children per woman).[50] In the mid nineteenth century about two thirds of all newborn survived to their thirtieth birthday, which implies that usually more than one potential heir was available when the farms were transferred and that accordingly the choice of successor was not a trivial decision.[51]

A special problem with family reconstitution data is that, for in-migrating couples, we do not know whether one or both spouses were remarried or married for the first time. This distinction can be done only for couples that were married in any of the five parishes of study. In cases of remarriage, it was noted in the marriage record if any of the spouses had been previously married. In the sample of both first marriages and remarriages are included (a total

of 2,693 couples). In order to make clear whether the pattern of mate selection is different for spouses marrying for the first time a smaller sample of first marriages is studied as well (1,374 couples). The latter sample is motivated because it could highlight possible differences in homogamy depending on the marital status of spouses when the actual marriage was entered. On the other hand we are well aware that results may be biased since this population is selected on the criterion that the couple married and settled down in the area of investigation.

Measuring and modelling homogamy

Tables 2 and 3 present the number of couples distributed by social origin of the spouses. In table 2, all marriages are included, while table 3 only includes first marriages. In these cross-classification tables, homogamous unions are counted in the diagonal cells. As can be seen in these tables, the count in the diagonal cell is larger than the rest of the counts in the respective row or column for freeholders, noble tenants and landless, which is an indication of positive assortative mating.

- Table 2 and 3 about here

Given the four-group occupational classification that is used here, total homogamy was about 40 per cent over the entire period 1829–1894 in the two populations of study (see table 4). Comparing the two periods it seems as if homogamy, if anything, became stronger over time, but the differences between the periods are rather small (38 per cent in the first period and 44 per cent in the second). Table 5 indicates that, for the whole period 1829–1894, the percentage of males who where married to a social equal was higher for landless and tenants,

and lower for semi-landless and farmers. For landless and tenants homogamy was also stronger for males than for females, while the opposite was true for tenants and semi-landless. While homogamy was more pronounced in the first period for individuals of tenant origin, the opposite was true for individuals of landless background. These tendencies counter-balanced each other, which may help to explain why no changes over time in total homogamy could be observed.

- Table 4 and 5 about here

Table 4 and 5 indicate the occurrence of homogamy in the rural population we are studying. However, to be able to compare the preferences for homogamous marriages between the separate occupational groups, or over time, the social structure must be taken into consideration. Thus, not only absolute homogamy must be analysed, but also relative homogamy, and one possible method to deal with the latter is log-linear analysis.

Log-linear analysis has been widely used to model cross-classification count data of the kind available to us here.[52] Log-linear models have, for instance, often been used in analysing social mobility,[53] but also in analyses of mating patterns both in historical and contemporary populations.[54] In log-linear analysis the count in the cells in a cross-classification table is modelled multiplicatively. In the simplest case – what is usually refereed to as the independence model – the count in a cell is assumed to depend only on the marginal distributions in the table:

$$ln(f_{ij}) = u + h_i + w_j$$

where u is the grand mean, h_i is the row effects (social structure of husbands), w_j is the columns effects (social structure of wives). If this model fits the observed data there is nothing structuring the mating process except the availability of spouses of different origins, and thus the mating process itself is completely random. This model will only be included for comparisons. The modelling strategy will be to identify a number of theoretically relevant models that can be tested and compared. Since we are interested in studying homogamy over time we have divided the sample into two different time periods (see table 2 above). Thus the first model to test is the independence model taking changes in social structure over time into account. This is done both by including a parameter for time period and interaction terms between time period and row and column effects. This model can then be compared with different homogamy models.

Table 6 presents an overview over the different models. As already mentioned, the independence model assumes that there is no systematic differences between different cells in the table, which will be used as a comparison. The equal homogamy model assumes that people have a tendency of marrying homogamously, i.e. to marry someone from the same social group, and that this tendency does not differ between social groups. In other words, all social groups are equally likely to marry someone from the same social group.

- Table 6 about here

In the case of pre-industrial rural society, however, we expect the mating process to be different in different social groups. Landholding peasants, and especially farmers on freehold and crown land, can be expected to have wanted to marry homogamously due to the importance of access to land to be able to secure ones social status. Landless people, on the other hand, cannot be expected to have preferred to marry other landless for financial reasons.

On the contrary, marrying a landholding peasant would immediately imply social upward mobility. Of course, they may have been forced to marry a landless spouse due to lack of alternatives, but we may still expect to find differences between the social groups in the strength of homogamy. The differential homogamy model allow for different homogamy effects in different social groups.

Sometimes it is argued that the main social difference in pre-industrial rural society was between the landed and the non-landed, while differences within these groups were much smaller.[55] In order to test this we use a land homogamy model, which has one parameter for peasants marrying peasants, and one for non-peasants marrying non-peasants.

Since partner choice was intimately connected to social mobility, marrying upwards (hypergamy) was most likely a desired goal of many landless and semi-landless. It could also be argued that it should have been easier for women to marry upwards, since they were not the managers of the farms, while a farmer son in the process of taking over the family farm might have been more inclined to marry a spouse of landless origin, since no transfer of responsibility over the farm was transferred to her. It is also possible that his parents looked more favourable upon such a match than if their daughter was to marry a landless male, who then, in effect, would be the manager of the farm. In order to tests this hypothesis we use three different hypergamy models: one model with a separate parameter each for males and females marrying upwards, one model for women marrying upwards and one for men marrying upwards.

The next step is to compare these different models. Different tests are available to check the model fit.[56] The most commonly used is the likelihood ratio test of the null-hypothesis that the model fits the data. High values of the test statistic (the deviance statistic, G^2) indicate a poor fit and significance levels below 0.05 testify that the model does not fit the data, which in itself can give useful information about the mating process. For example, a rejection of the

independence model implies that the mating process is not random, but that there are some underlying structures determining who marries who.

Nested models can be compared using a similar test where the difference in the deviance statistics between the two models is χ^2-distributed under the null-hypothesis of no difference between a larger and a smaller model, with the degrees of freedom equal to the difference in the number of parameters estimated.[57] There is also an alternative way of comparing models that does not require models to be nested, called the Bayesian Information Criterion (BIC):

$$BIC = G^2 - df \log(N)$$

where G^2 is the deviance statistic (the likelihood ratio test statistic), *df* the degrees of freedom, and *N* the number of observations. A model with lower BIC is preferred, and models with negative BIC can be considered to have a reasonable fit.[58] Table 7 displays the 15 different models estimated and the statistics used for model check.[59]

- Table 7 about here

As expected the independence model is clearly rejected (the critical value for G^2 at the 0.01 level with 25 degrees of freedom is 54.9), which shows that the mating process is not random. Taking the changed social structure into account (model 3) significantly improves the model fit, but the model is still rejected. In fact only the differential homogamy model has a reasonable fit as shown both by the BIC and the likelihood ratio test (p-value>0.1). The differential homogamy model controlling for changes over time is not preferred to the one not controlling for period differences, which points to the conclusion that the pattern of

homogamy did not change significantly between the two time periods. There seems to be no difference in which of the two models that is preferred between the sample of all married couples and the sample of first marriages. These comparisons show that a model controlling for changes over time in the social structure and allowing homogamy to differ between all social groups best describes the data.

Apparently the marriage pattern was characterized by a high degree of homogamy, but the strength of it differed between the different social groups. An analysis of the estimated parameters (d_k) can inform us how, more exactly, homogamy differed between the different social groups. Table 8 shows the parameter estimates for the period as a whole and for each of the sub-periods separately. In the latter case, the coefficients shown in the table are the net effects calculated from the estimated interaction model (model 7), and the $p_{interac.}$ is the p-values for the interaction effects. The coefficients show the effects of the diagonal parameter on $ln(f_{ij})$ in each period while the exponentiated coefficients show the effect on the expected count (f_{ij}): a value of 2 implies that the estimated count in the cell is twice as high as could be expected taking only the marginal distributions (social structure) into consideration.

- Table 8 about here

In panel A of table 8 farmers show the strongest homogamy with an effect of about 5, which indicates that the farmer-marrying-farmer case is more than five times as frequent than what could be expected from a random match, controlling for changed social status over time. Tenants show a weaker, but still quite powerful effect, and also the landless have a statistically significant homogamy effect, albeit lower than for noble tenants. Only in the case of the semi-landless can we not find any indication of homogamy. Most likely this is explained by the fact that this group is quite heterogeneous, including both smallholders and

virtually landless cottagers; groups that can be expected to have married in opposite directions. Apart from the semi-landless there seems to be a clear hierarchy in homogamy, with the farmers being clearly the most homogamous, tenants taking a middle position and landless least homogamous. Looking at panel B, it is clear that the same hierarchy pertains to the first married couples. The only noteworthy difference between the full sample and the sample of first marriages is that the homogamy among farmers is even stronger when only looking at first marriages.

These results are quite as expected. Landholding farmers had most to risk in the mating process and most to gain by marrying a like. Consequently they showed the strongest homogamy. It also seems reasonable that homogamy in this group was stronger for first marriages, partly because parental control was stronger over first marriages, and partly because of a higher availability of potential spouses in the same social groups for never married, than for widows or widowers. Migration selectivity can also be at work here. We know that farmers had lower mobility than landless and semi-landless,[60] and it may also be the case that the children of farmers who were chosen to take over the family holding were even less likely to move, which would contribute to the higher likelihood of homogamy observed for first marriages among farmers.

Turning to changes over time, none of the interaction terms are statistically significant, which implies that we cannot show any clear changes over time in the pattern of homogamy, and this was also the conclusion from the model comparisons in table 7. If we look at the estimated effects there seems to be a strengthening of homogamy among farmers if we look at all marriages, but a weakening of homogamy if we look only at first marriages. For semi-landless there is a tendency towards heterogamy over time, as indicated by the negative coefficient in the second period. For the other social groups the differences between the periods are small. Thus, taken together, it seems as if homogamy remained strong during the

entire period, which does not support hypotheses of fundamental change in the mating patterns over the nineteenth century as envisaged by modernization theories, at least in rural areas.

Conclusion

Finding the right partner was a crucial event for many people in pre-industrial society. Marriage was not only an act of love but also a financial transaction. This is especially true for landowning peasants (farmers and tenants), since they had most to risk from a bad match. Parental control was strong over marriage, but peasant children themselves also preferred a partner from a similar background. Most likely the economic concern was only one reason for this preference for homogamy. More intangible aspects related to differences in social status and self-identification with ones own group also contributed. The ethnological evidence and contemporary accounts give many examples of the importance of such perceived differences between social groups in preindustrial rural Sweden.

In this paper we have studied quantitatively the pattern of homogamy in a rural community in southern Sweden during the nineteenth century; a period with quite dramatic economic and social changes following agricultural transformation. The results show a society characterized by a relatively strong tendency towards homogamy. Given the occupational classification in this study, about 40 per cent of the couples were homogamous unions. Homogamy was, however, not uniform across social groups. Farmers on freehold and crown land were considerably more homogamous than landless labourers, with tenants on manorial land taking a middle position. Only the semi-landless did not show any homogamy at all, in the sense that they were not more likely to marry someone from the same social origin than what could be expected from the observed social structure. This is probably

explained by the fact that this was a heterogeneous group positioned in between the landed groups and the landless labourers.

Homogamy was also stronger for first marriages, especially among farmers, probably as a result of less parental control and lower supply of potential marriage partners in the case of remarriages. Quite interestingly the mating pattern also remained fairly constant over time. Despite this being a period of quite rapid societal changes, homogamy did not weaken over time. Apparently, the choice of marriage partner remained an important financial and social concern, which does not support the ideas in the literature that changes in mentality or structure of opportunities for young people following modernisation implied a transition to a more heterogamous society where love replaced economics as the driving force in partner choice.

The rather strong homogamy characterising especially the landowning peasants make perfectly good sense in the light of the economic realities of peasants in rural society. The landless, on the other hand, did not have much reason to marry within their group, since marrying a farmer or a tenant would be a major step up the social ladder. Instead, the homogamy we observe in this group is to a large extent a function of the preference for homogamy in the landed group; in most cases there were simply no alternatives for landless except to marry other landless.[61] The profound economic changes during the nineteenth century following agricultural transformation and early industrialization did not change this situation. If anything, homogamy among the farmers got stronger over time, testifying that the mating pattern was part of a very slow changing structure deeply rooted in rural society.

ENDNOTES

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[1] John Hajnal, "European Marriage Patterns in Perspective", in D. V. Glass and D. E. C. Eversley (eds), *Population in History. Essays in Historical Demography* (London, 1965), pp. 101–143; John Hajnal, "Two Kinds of Pre-industrial Household Formation System", in Richard Wall, Jean Robin and Peter Laslett (eds), *Family Forms in Historic Europe* (Cambridge, 1983), pp. 65–104.

[2] E.g. Lawrence Stone, *The Family, Sex and Marriage in England 1500–1800* (London, 1979), especially chapter 7; Michael Mitterauer and Reinhard Sieder, *The European Family* (Chicago, 1982), chapter 6.

[3] Joseph Ehmer, "Marriage", in David I. Kertzer and Marzio Barbagli (eds), *Family Life In the Long Nineteenth Century 1789–1913* (New Haven/London, 2002), pp. 282–321; David W. Sabean, *Kinship in Neckarhausen, 1700–1870* (Cambridge, 1998).

[4] See e.g. Pierre Bourdieu, ”Marriage Strategies as Strategies of Social reproduction”, in Robert Forster and Orest Ranum (eds), *Family and Society. Selections from the Annales, Économies, Sociétés, Civilisations* (Baltimore, MD, 1976), pp. 117–144.

[5] See, e.g. Matthijs Kalmijn, “Intermarriage and Homogamy: Causes, Patterns and Trends”, *Annual Review of Sociology,* 24 (1998), pp. 395–421.On the other hand, people of lower status could make a social career through marriage, thereby increasing their wealth and status. A maid, marrying a peasant head of household would immediately improve her position to mistress and supervisor of the female servants. A corresponding union between a farmhand and a farmer daughter would mean a social career to the former, who would become the head of household, the guardian of his wife, and the manager of the farm. Though such cases were few (see Christer Lundh “Remarriages in Sweden in the Eighteenth and Nineteenth Centuries”, *History of the Family,* 7 (2002), pp. 423–450), they would counteract the tendency to homogamy.

[6] Gary S. Becker, *A Treatise on the Family*. Enlarged edition (Cambridge, MA, 1991), chapter 4.

[7] See e.g. Orvar Löfgren, “Family and Household among Scandinavian Peasants: An Exploratory Essay”, *Ethnologica Scandinavia* (1974), pp. 17–52; Orvar Löfgren, *Arbetsfördelning och könsroller i bondesamhället – kontinuitet och förändring* (Lund 1977); Louise A. Tilly and Joan W. Scott, “Women’s Work and the Family in Nineteenth Century Europe”, *Comparative Studies in Society and History*, 17 (1975), pp. 36–64.

[8] According to the Swedish inheritance legislation all children inherited their parents. Up to 1845, sons inherited twice the amount of daughters, but from 1845 all children inherited equal parts. Despite this general rule, the parents could to some extent favour one chosen child by bequeathing movable property or plots of newly acquired land. Even though all children had the right to their lawful parts, they could not always count on inheriting *land*. In cases when the farm was too small to divide, an heir with a larger share could buy out the others. This rule was valid up to 1845, after that a brother could buy out a sister. For a general description of the Swedish inheritance system, see Christer Winberg, "Familj och jord i tre västgötasocknar. Generationsskiften bland självägande bönder ca 1810–1870", *Historisk tidskrift* 101 (1981):278–310, and Martin Dribe and Christer Lundh, "Gender Aspects of Inheritance Strategies and Land Transmission in Rural Scania, Sweden, 1720–1840", in Emiko Ochiai (ed), *The Logic of Female Succession: Rethinking Patriarchy and Patrilinearity in Global Perspective* (Kyoto, 2003a), pp. 53–73.

[9] See Martin Dribe and Christer Lundh, "Retirement as a Strategy for Land Transmission: A Micro Study of Nineteenth Century Rural Sweden", *Continuity and Change*, 20 (2005), forthcoming; Christer Lundh and Mats Olsson, "The Institution of Retirement on Scanian Estates in the Nineteenth Century", *Continuity and Change,* 17 (2002), pp. 373–403; David Gaunt, "The Property and Kin Relationships of Retired Farmers in Northern and Central Europe", in Richard Wall, Jean Robin and Peter Laslett (eds), *Family Forms in Historic Europe* (Cambridge, 1983), pp. 249–279; Löfgren, "Family and Household among Scandinavian Peasants".

[10] Dribe and Lundh, "Gender Aspects of Inheritance Strategies".

[11] Winberg, "Familj och jord i tre västgötasocknar"; Dribe and Lundh, "Retirement as a Strategy".

[12] *Sveriges rikes lag*, Giftobalken (the marriage act), 1 chapter: 2§, 5§, 6 chapter: 1–2§§.

[13] Rob. K Wikman, quoted in John Granlund, "Bröllopsfunktionärer", *Fataburen* (1969), pp. 133–148, quotation p. 134.

[14] Marianne Andersson, "Böndernas bönemän", *Fataburen* (1969), pp. 53–60, p. 53; Assar Jansson, "Giftermål med syskonbyte under 1700-talet", *Rig,* 38 (1955), pp 82–88.

[15] Eva Wigström, *Allmogeseder i Rönnebergs härad på 1840-talet* (Malmö, 1985. First published 1891), pp. 27–28; Nils G. Bruzelius, *Allmogelivet i Ingelstads härad i Skåne* (Lund, 1976. First published 1876.), p. 34.

[16] Nicolovius, *Folklifwet i Skytts härad i Skåne vid början af detta århundrade.* (Malmö, 1990. First published 1847), pp. 121–122.

[17] Wigström, *Allmogeseder i Rönnebergs härad*, p. 29.

[18] Bruzelius, *Allmogelivet i Ingelstads härad*, p. 34.

[19] Wigström, *Allmogeseder i Rönnebergs härad*, p. 28; Bruzelius, *Allmogelivet i Ingelstads härad,* p. 34.

[20] Nils-Arvid Bringéus, *Unnarydsborna. Lasses i Lassaberg anteckningar om folklivet i Södra Unnaryd vid 1800-talets början.* (Stockholm, 1967), p. 105. On the initiative of the ethnologist Nils Gabriel Djurklou, Lars Andersson (called Lasse in Lassaberg) who was an active farmer recorded his notes on peasant life in Unnaryd in Småland, the province north of Scania, during the period 1870 to 1872. The original manuscript by Lasse in Lassaberg was published in 1967 by the professor in ethnology Nils-Arvid Bringeus.

[21] Wigström, *Allmogeseder i Rönnebergs härad*, p. 27.

[22] See e.g. Bringéus, *Unnarydsborna*, p. 105.

[23] E.g. Orvar Löfgren, "Från nattfrieri till tonårskultur", *Fataburen* (1969), pp. 25–52, p. 35–36; Gunilla Kjellman, *Bröllopsgåvan* (Lund, 1979); see also Stone, *The Family, Sex and Marriage*, p. 182.

[24] Andersson, "Böndernas bönemän", p. 53.

[25] Löfgren "Från nattfrieri till tonårskultur", pp. 35–36. For a discussion on the link between dowries and homogamy, see Sabean, *Kinship in Neckarhausen*, pp. 466–469.

[26] Löfgren "Från nattfrieri till tonårskultur", pp. 35–36.

[27] Wigström, *Allmogeseder i Rönnebergs härad*, pp. 27–29; Nicolovius, *Folklifwet i Skytts härad,* p. 121; Bruzelius, *Allmogelivet i Ingelstads härad,* p. 34.

[28] Christer Winberg, *Folkökning och proletarisering. Kring den sociala strukturomvandlingen på Sveriges landsbygd under den agrara revolutionen* (Lund, 1977, 2nd edition), pp. 261–262; Christer Lundh, "Marriage and Economic Change in Sweden during the 18th and 19th Century", in Isabelle Devos and Liam Kennedy (eds), *Marriage and Rural Economy. Western Europe since 1400* (Turnhout, 1999), pp. 217–241.

[29] See mainly William J. Goode, *The Family* (Englewood Cliffs NJ, 1964), pp. 108–109; Edward Shorter, *The Making of the Modern Family* (Glasgow, 1977), pp. 152–163, 250–262. See also Marco van Leeuwen and Ineke Maas, "Partner Choice and Homogamy in the Nineteenth Century: Was There a Sexual Revolution in Europe?" *Journal of Social History*, 36 (2002), pp. 101–123.

[30] See, for example, Van Leeuwen and Maas, "Partner Choice and Homogamy".

[31] See, for example, Michael Anderson, *Family Structure in Nineteenth Century Lancashire* (Cambridge, 1971); Tamara K. Hareven, *Family Time and Industrial Time* (Cambridge, 1982); Angelique Janssens, *Family and Social Change. The Household as a Process in an Industrializing Community* (Cambridge, 1993).

[32] The Scanian Demographic Database is a collaborative project between the Regional Archives in Lund and the Research Group in Population Economics at the Department of Economic History, Lund University. The source material is described in Elisabeth Reuterswärd and Franceska Olsson, "Skånes demografiska databas 1646–1894. En källbeskrivning", *Lund Papers in Economic History,* 33 (1993), pp. 1–62, and the quality of data is analysed in Tommy Bengtsson and Christer Lundh, "Evaluation of a Swedish

Computer Program for Automatic Family Reconstitution", *Lund Papers in Economic History,* 8 (1991), pp.1–43.

[33] See Martin Dribe, *Leaving Home in a Peasant Society. Economic Fluctuations, Household Dynamics and Youth Migration in Southern Sweden, 1829–1866* (Lund/Södertälje, 2000).

[34] Statistics Sweden, *Befolkningsutvecklingen under 250 år. Historisk statistik för Sverige* (Stockholm, 1999), p.10.

[35] See Bengtsson and Lundh, "Evaluation of a Swedish Computer Program".

[36] See, e.g., Steven Ruggles, "Migration, Marriage and Mortality: Correcting Sources of Bias in English Family Reconstitution 1580–1837", *Population Studies,* 46 (1992), pp. 507–522; Steven Ruggles, "The Limitations of English Family Reconstitution: English Population History from Family Reconstitution 1580–1837", *Continuity and Change,* 14 (1996), pp. 105–130; E. A. Wrigley, "The Effect of Migration on the Estimation of Marriage Age in Family Reconstitution Studies", *Population Studies,* 48 (1994), pp. 81–97; Sune Åkerman, "An Evaluation of the Family Reconstitution Technique." *Scandinavian Economic History Review,* 25 (1977), pp. 160–170; Poul Thestrup, "Methodological Problems of a Family Reconstitution Study in a Danish Parish Before 1800", *Scandinavian Economic History Review,* 20 (1972), pp. 1–26.

[37] See Dribe, *Leaving Home*; Martin Dribe, "Migration of Rural Families in 19th Century Southern Sweden. A Longitudinal Analysis of Local Migration Patterns", *History of the Family,* 8 (2003), pp. 247–265; Martin Dribe and Christer Lundh, "People on the Move.

Determinants of Servant Migration in Nineteenth Century Sweden", *Continuity and Change,* 20 (2005), forthcoming.

[38] See, e.g., Dribe, *Leaving Home*, chapter 2 for a discussion.

[39] Information on individual birthplaces was gathered from the catechetical examination registers. The linkage was done in the research project "Early-Life Conditions, Social Mobility, and Longevity" headed by Tommy Bengtsson and financed by the U.S. National Institutes of Health/National Institute of Ageing (1P01AG18314-02), the Swedish Council for Social Research, and the Bank of Sweden Tercentenary Foundation. For details on the source material see, e.g., Dribe, *Leaving Home*, chapter 2.

[40] M.H.D. van Leeuwen and I. Maas, "HISCLASS", paper presented at the 5th European Social Science History Conference (Berlin, 24–27 March 2004). This classification is based on the more detailed occupational classification in HISCO, see M.H.D. van Leeuwen, I. Maasand A. Miles, *HISCO. Historical International Standard Classification of Occupations* (Leuven, 2002).

[41] For a detailed analysis of rural artisans, see Carl-Johan Gadd, *Självhushåll eller arbetsdelning? Svenskt lant- och stadshantverk ca 1400–1860* (Göteborg, 1991).

[42] We have used 1/16 *mantal* as the limit of subsistence *Mantal* is an old tax unit, originally meaning "the number of men". During the sixteenth century, every landholding was supposed to constitute one *mantal*, i.e. be large enough to support one peasant and his family as well as produce a surplus to be paid as tax to the crown. With few exceptions, this was indeed the

case during the sixteenth century. Thus, at this time a *mantal* simply meant that the peasant had land and was supposed to pay tax to the crown. However, due to repeated subdivisions of landholdings, farmsteads typically got smaller and smaller fractions of a *mantal* assigned to them. Furthermore, reclamation of new land, as well as changed methods of cultivation led to increased land productivity, which makes a comparison over time of the size of different farms almost impossible. Nevertheless, the *mantal* can be used at least as a rough measure of the size of a farm relative to other farms in the village at the same point in time. Thus, by comparing the different *mantal* peasants had, the relative productive potential of the landholdings can be determined. See Dribe, *Leaving Home*, pp. 26–7. It has been calculated that in Harjager District, where Hög and Kävlinge are situated, one *mantal* was equivalent to about 200 acres in 1820, Emil Sommarin, *Det skånska jordbrukets ekonomiska utveckling 1801–1914, Vol. 2–3* (Lund, 1939), p. 25.

[43] See, e.g., Dribe and Lundh, ”Gender Aspects of Inheritance Strategies”; Carl-Johan Gadd, *Den agrara revolutionen 1700–1870. Det svenska jordbrukets historia, band 3* (Stockholm, 2000).

[44] See also Dribe *Leaving Home*, chapter 2.

[45] See Mats Olsson, *Storgodsdrift. Godsekonomi och arbetsorganisation i Skåne från dansk tid till mitten av 1800-talet* (Lund/Stockholm, 2002).

[46] See, e.g., Wigström, *Allmogeseder i Rönnebergs härad*.

[47] See Lars Ericson, *Svenska knektar. Indelta soldater, ryttare och båtsmän i krig och fred* (Lund, 2002).

[48] Christer Lundh, 'Swedish Marriages. Custom, Legislation and Demography in the Eighteenth and Nineteenth Centuries', *Lund Papers in Economic History* 88 (2003), 50. Recalculation of means for 1740–1849 and 1850–1894 from the data of figure 7 and 8 respectively.

[49] Lundh, 'Swedish Marriages', 49–51.

[50] The figures of total marital fertility refer to the period 1766–1865 in the same area, see Tommy Bengtsson and Martin Dribe, "Agency, Social Class, and Fertility in Southern Sweden 1766–1865", in George Alter, Noriko O. Tsuya and Wang Feng (eds), *Prudence and Pressure*, Book manuscript, Chapter 4.

[51] Calculated from period life tables for Sweden 1846–50, Statistics Sweden, *Befolkningsutvecklingen under 250 år. Historisk statistik för Sverige* (Stockholm, 1999), pp. 119–20. See also Dribe and Lundh, "Retirement as a Strategy for Land Transmission"; Dribe and Lundh, "Gender Aspects of Inheritance Strategies".

[52] See, e.g., Leo A. Goodman, "On the Measurement of Social Mobility: An Index of Status Persistence", *American Sociological Review*, 34 (1969), pp. 831–850; Leo A. Goodman, "Multiplicative Models for the Analysis of Occupational Mobility Tables and Other Kinds of Cross-Classification Tables", *American Journal of Sociology*, 84 (1979), pp. 804–819.

[53] For examples in historical research see Jan van Bavel, Hilde Peeters and Koen Matthijs, ”Connections between Intergenerational and Marital Mobility. A Case Study: Leuven, 1830–1910”, *Historical Methods*, 31 (1998), pp. 122–134; Marco van Leeuwen and Ineke Maas, “Log-linear Analysis of Changes in Mobility Patterns. Some Models with an Application to the Amsterdam Upper Classes in the Second Half of the Nineteenth Century”, *Historical Methods*, 24 (1991), pp. 66–79; Frans van Poppel, Jurjen de Jong and Aart C. Liefbroer, “The Effects of Paternal Mortality on Son’s Social Mobility. A Nineteenth-Century Example”, *Historical Methods*, 31 (1998), pp. 101–112.

[54] See, e.g., Matthijs Kalmijn, “Status Homogamy in the United States”, *American Journal of Sociology*, 97 (1991), pp. 496–523; Matthijs Kalmijn, “Assortative Mating by Cultural and Economic Occupational Status”, *American Journal of Sociology*, 100 (1994), pp. 422–452; Robert D. Mare, “Five Decades of Educational Assortative Mating”, *American Sociological Review*, 56 (1991), pp. 15–32; Robert McCaa, “Isolation or Assimilation? A Log Linear Interpretation of Australian Marriages, 1947–60, 1975, and 1986”, *Population Studies,* 43 (1989), pp. 155–162; Bart van de Putte, “Homogamy by Geographical Origin: Segregation in Nineteenth-Century Flemish Cities (Gent, Leuven, and Aalst)”, *Journal of Family History*, 28 (2003), pp. 364–390; Van Leeuwen and Maas, “Partner Choice and Homogamy”.

[55] See, e.g., Ingrid Eriksson and John Rogers, *Rural Labor and Population Change. Social and Demographic Developments in East-central Sweden during the Nineteenth Century*. (Uppsala, 1978), pp. 57–64. For demographic evidence see Bengtsson and Dribe, “Agency, Social Class, and Fertility”; Dribe, *Leaving Home*; Martin Dribe and Christer Lundh, “Husmäns och torpares demografi 1815–1865”, in Kerstin Sundberg and Christer Lundh (eds), *Gatehus och gatehusfolk i skånska godsmiljöer* (Lund, 2002), pp. 143–156.

[56] For a description of log-linear models see, e.g., Alan Agresti, *An Introduction to Categorical Analysis* (New York, 1996); Daniel Zelterman, *Advanced Log-Linear Models Using SAS* (Cary NC, 2002).

[57] Nested models are built hierarchically so that a larger model contains the same variables as the smaller model plus some additional variables. In most cases statistical tests devised for model comparisons, such as the likelihood ratio test, requires models to be nested in this way.

[58] See Adrian E. Raftery, "Choosing Models for Cross-Classifications", *American Sociological Review*, 51(1986), pp. 145–146.

[59] Model estimations were made using the GENMOD procedure in SAS. For log-linear models in SAS see Zelterman, *Advanced Log-Linear Models*.

[60] Dribe, *Leaving Home*; Martin Dribe, "Migration of Rural Families'.

[61] Cf Kalmijn, "Intermarriage and Homogamy", p. 397.

Table 1. Cross-classification of spouses' social origin in five Scanian parishes 1829–1894 using HISCLASS. All married.

	Wife									
Husband	1+2	3+4+5	6+7	8a	8b	9	10a+12a	11	10b+12b	N
1829–1864										
1+2	0	0	0	2	0	0	2	0	1	5
3+4+5	0	0	0	0	0	0	0	0	1	1
6+7	0	0	3	0	9	0	14	1	15	42
8a	2	0	12	81	46	7	48	0	49	245
8b	0	1	11	31	205	2	92	0	103	445
9	0	0	3	2	7	5	7	0	13	37
10a+12a	1	1	13	43	143	14	128	0	106	449
11	1	0	0	0	0	0	0	0	0	1
10b+12b	0	2	17	27	84	13	74	0	94	311
N	4	4	59	186	494	41	365	1	382	1536
1865–1894										
1+2	1	0	0	1	1	0	1	0	1	5
3+4+5	0	0	1	1	1	0	0	0	1	4
6+7	0	0	5	6	3	5	11	1	41	72
8a	1	2	5	35	10	1	24	0	38	116
8b	0	0	9	17	27	1	40	0	58	152
9	0	0	2	2	6	3	15	0	22	50
10a+12a	1	1	21	27	31	21	102	0	152	356
11	0	0	0	0	0	0	0	0	0	0
10b+12b	2	1	19	19	28	26	111	0	227	433
N	5	4	62	108	107	57	304	1	540	1188
1829–1894										
1+2	1	0	0	3	1	0	3	0	2	10
3+4+5	0	0	1	1	1	0	0	0	2	5
6+7	0	0	8	6	12	5	25	2	56	114
8a	3	2	17	116	56	8	72	0	87	361
8b	0	1	20	48	232	3	132	0	161	597
9	0	0	5	4	13	8	22	0	35	87
10a+12a	2	2	34	70	174	35	230	0	258	805
11	1	0	0	0	0	0	0	0	0	1
10b+12b	2	3	36	46	112	39	185	0	321	744
N	9	8	121	294	601	98	669	2	922	2724

Note:

HISCLASS	Description
1+2	Higher managers and professionals
3+4+5	Lower managers and professionals, clerical and sales
6+7	Skilled workers
8a	Farmers on freehold and crown land
8b	Tenant farmers on manorial land
9	Lower skilled workers

10a + 12a Semi-landless farm workers
11 Unskilled workers
10b + 12b Landless farm workers
Source: Family reconstitutions, poll-tax registers and catechetical examination registers for Halmstad, Hög, Kågeröd, Kävlinge and Sireköpinge parishes, The Scanian Demographic Database, Department of Economic History, Lund University.

Table 2: Cross-classification of spouses' social origin in five Scanian parishes 1829–1894. All married.

	Wife				
Husband	Farmers	Tenants	Semi-landless	Landless	N
1829–1864					
Farmers	81	46	48	68	243
Tenants	31	205	92	116	444
Semi-landless	43	143	128	133	447
Landless	29	100	95	164	388
N	184	494	363	481	1522
1865–1894					
Farmers	35	10	24	44	113
Tenants	17	27	40	68	152
Semi-landless	27	31	102	194	354
Landless	27	37	137	351	552
N	106	105	303	657	1171
1829–1894					
Farmers	116	56	72	112	356
Tenants	48	232	132	184	596
Semi-landless	70	174	230	327	801
Landless	56	137	232	515	940
N	290	599	666	1138	2693

Source: See table 1.

Table 3: Cross-classification of spouses' social origin in five Scanian parishes 1829–1894. First married.

	Wife				
Husband	Farmers	Tenants	Semi-landless	Landless	N
1829–1864					
Farmers	36	13	20	21	90
Tenants	13	131	51	58	253
Semi-landless	22	86	70	71	249
Landless	17	60	51	69	197
N	88	290	192	219	789
1865–1894					
Farmers	14	4	14	18	50
Tenants	5	19	19	52	95
Semi-landless	14	21	41	94	170
Landless	10	15	75	170	270
N	43	59	149	334	585
1829–1894					
Farmers	50	17	34	39	140
Tenants	18	150	70	110	348
Semi-landless	36	107	111	165	419
Landless	27	75	126	239	467
N	131	349	341	553	1374

Source: See table 1.

Table 4: Total homogamy.

	All married		First married	
	Couples	N	Couples	N
Total homogamy	41%	2693	40%	1374
1829–1864	38%	1522	39%	789
1865–1894	44%	1171	42%	585

Note: Total homogamy = total number of couples where both spouses had the same social origin as a percentage of the total number of couples.

Source: See table 1.

Table 5: Homogamous males and females.

	All married				First married			
	Males		Females		Males		Females	
	%	N	%	N	%	N	%	N
1829–1864								
Farmers	33	243	44	184	40	90	41	88
Tenants	46	444	41	494	52	253	45	290
Semi-landless	29	447	35	363	28	249	36	192
Landless	42	388	34	481	35	197	32	219
1865–1894								
Farmers	31	113	33	106	28	50	33	43
Tenants	18	152	26	105	20	95	32	59
Semi-landless	29	354	34	303	24	170	28	149
Landless	64	552	53	657	63	270	51	334
1829–1894								
Farmers	33	356	40	290	36	140	38	131
Tenants	39	596	39	599	43	348	43	349
Semi-landless	29	801	35	666	26	419	33	341
Landless	55	940	45	1138	51	467	43	553

Source: See table 1.

Table 6: Models of homogamy

Independence

	Wife			
Husband	FA	TE	SL	LL
FA	0	0	0	0
TE	0	0	0	0
SL	0	0	0	0
LL	0	0	0	0

Equal homogamy (d)

	Wife			
Husband	FA	TE	SL	LL
FA	d	0	0	0
TE	0	d	0	0
SL	0	0	d	0
LL	0	0	0	d

Differential homogamy (d_k)

	Wife			
Husband	FA	TE	SL	LL
FA	d_1	0	0	0
TE	0	d_2	0	0
SL	0	0	d_3	0
LL	0	0	0	d_4

Land homogamy (c_m)

	Wife			
Husband	FA	TE	SL	LL
FA	c_1	c_1	0	0
TE	c_1	c_1	0	0
SL	0	0	c_2	c_2
LL	0	0	c_2	c_2

Hypergamy* (h_n)

	Wife			
Husband	FA	TE	SL	LL
FH	0	h_1	h_1	h_1
NT	h_2	0	h_1	h_1
SL	h_2	h_2	0	h_1
LL	h_2	h_2	h_2	0

Female hypergamy* (h^f)

	Wife			
Husband	FA	TE	SL	LL
FA	0	h^f	h^f	h^f
TE	0	0	h^f	h^f
SL	0	0	0	h^f
LL	0	0	0	0

Male hypergamy* (h^m)

	Wife			
Husband	FA	TE	SL	LL
FA	0	0	0	0
TE	h^m	0	0	0
SL	h^m	h^m	0	0
LL	h^m	h^m	h^m	0

FA = Farmers
TE = Tenants
SL = Semi-landless
LL = Landless

* Marrying upwards

Table 7: Model comparisons.

	Model	All married			First married[+]		
		G^2	*df*	*BIC*	G^2	*df*	*BIC*
1	Independence						
	(h_i, w_j)	756.5	25	669.8	435.9	25	349.2
2	Time difference						
	(h_i, w_j, t)	710.6	24	627.4	405.5	24	322.3
3	Changed social structure						
	$(h_i, w_j, t, h_i*t, w_j*t)$	236.5	18	174.1	141.8	18	79.4
4	Equal homogamy						
	$(h_i, w_j, t, h_i*t, w_j*t, d)$	100.9	17	42.0	86.3	17	27.4
5	Equal homogamy, time difference						
	$(h_i, w_j, t, h_i*t, w_j*t, d, d*t)$	98.4	16	42.9	83.1	16	27.6
6	Differential homogamy						
	$(h_i, w_j, t, h_i*t, w_j*t, d_k)$	11.9*	14	-36.6	15.2*	14	-33.4
7	Differential homogamy, time diff.						
	$(h_i, w_j, t, h_i*t, w_j*t, d_k*t)$	10.9*	10	-23.8	13.1*	10	-21.6
8	Land homogamy						
	$(h_i, w_j, t, h_i*t, w_j*t, c_m)$	159.6	17	100.7	110.1	17	51.2
9	Land homogamy, time diff.						
	$(h_i, w_j, t, h_i*t, w_j*t, c_m, c_m*t)$	151.2	16	95.7	108.4	16	53.0
10	Hypergamy						
	$(h_i, w_j, t, h_i*t, w_j*t, h_n)$	99.0	16	43.5	84.6	16	29.1
11	Hypergamy, time diff.						
	$(h_i, w_j, t, h_i*t, w_j*t, h_n, h_n*t)$	95.5	14	47.0	81.0	14	32.4
12	Female hypergamy						
	$(h_i, w_j, t, h_i*t, w_j*t, h^f)$	127.2	17	68.2	93.7	17	34.8
13	Female hypergamy, time diff.						
	$(h_i, w_j, t, h_i*t, w_j*t, h^f*t)$	124.6	16	69.1	92.4	16	37.0
14	Male hypergamy						
	$(h_i, w_j, t, h_i*t, w_j*t, h^m)$	158.2	17	99.3	112.0	17	53.1
15	Male hypergamy, time diff.						
	$(h_i, w_j, t, h_i*t, w_j*t, h^m, h^m*t)$	158.1	16	102.6	109.4	16	53.9

[+]Only marriages recorded in the parishes.
*p>0.1, which implies that the model cannot be rejected at the 10 % level. All other models can be rejected below the 5 % level of significance.
h_i, husband's social origin (row effects)
w_j, wife's social origin (column effects)
t, time period (1829–1864, 1865–1894)
For explanations of other parameters see figure 1.

Source: See table 1.

Table 8: Parameter estimates, differential homogamy.

A. All married couples observed

	1829–1894			1829–1864			1865–1894		
	β	e^{β}	p	β	e^{β}	$p_{interac.}$	β	e^{β}	$p_{ref.cat.}$
FA	1.63	5.09	0.000	1.59	4.92	0.762	1.68	5.38	0.000
TE	0.70	2.02	0.000	0.68	1.97	0.694	0.79	2.19	0.001
SL	-0.02	0.98	0.882	0.06	1.06	0.386	-0.12	0.88	0.445
LL	0.43	1.53	0.000	0.40	1.49	0.661	0.48	1.62	0.000

B. First married (only marriages recorded in the parishes)

	1829–1894			1829–1864			1865–1894		
	β	e^{β}	p	β	e^{β}	$p_{interac.}$	β	e^{β}	$p_{ref.cat.}$
FA	1.93	6.88	0.000	1.98	7.22	0.568	1.81	6.11	0.000
TE	0.86	2.35	0.000	0.82	2.27	0.482	0.92	2.50	0.003
SL	-0.18	0.84	0.224	0.04	1.04	0.288	-0.42	0.66	0.077
LL	0.29	1.33	0.028	0.20	1.22	0.756	0.44	1.55	0.024

Note: Estimates for the sub-periods are net-effects (main effect plus period interaction effect) in the interaction model (model 7). 1865–1894 is the reference category and p-values for 1829–1864 ($p_{interac.}$) refer to significance tests of interaction effects between period and the diagonal parameters (d_k).

FA= Farmers on freehold and crown land
TE=Tenant farmers on manorial land
SL=Semi-landless
LL=Landless

Source: See table 1.

Map 1. The sample of parishes.