Partner Choice and Homogamy in the Nineteenth Century:
Was There a Sexual Revolution in Europe?

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Introduction

Courtship and marriage have been prominent on the research agendas of demographers, ethnographers, historians and sociologists alike, and, recently, on those of economists too. Mate selection is important for the well-being of the couples concerned, as well as of interest to their parents, friends, and society at large. Homogamy can markedly influence the distribution of resources. Both in the present and for generations to come, lineages of wealth, poverty, social support or animosity may be attenuated or strengthened. Furthermore, via procreation—or its absence—mate selection has consequences for the genetic composition and hence the future of the human species itself.

Long-term changes in the process of mate selection, which are the topic of this article, have received much attention from scholars. Using an impressive array of historical sources, they have
tried to illuminate the sweeping changes that have occurred over time. Not uncommonly in the study of long-term processes, the data studied in any one research tradition are not always sufficient to document these changes. Data on demographic behavior might not yield the desired information on human motives, even after thorough interrogation. Furthermore, sociological surveys are absent for most of historical time. Qualitative material, such as diaries or comments by contemporaries, might be both invaluable sources of in-depth information as well as the source of anxieties as to their representativeness and moral bias.

In this article both qualitative ethnographic data on partner choice and quantitative homogamy tables will be presented. Both types of data cover industrializing northern Sweden, the Sundsvall region, during the nineteenth century. Over the course of the century, the social structure of this region was transformed drastically. At the start of the period the region was overwhelmingly agrarian, with small farmers working arable land in the river valleys, keeping livestock in the meadows, and sometimes working for the lumber industry. The town of Sundsvall—the administrative center of the region and a regional marketplace—hosted some skilled workers in small workshops. Industrialization came in phases. The late-eighteenth century had already witnessed the first water-driven sawmills. The nineteenth century saw the introduction of steam-driven sawmills and, after 1900, electric-driven mills followed. The emergence and growth of a group of unskilled workers was the most marked change in the social structure over time. It was connected to the expansion of the timber industry. By the end of the century the transformation of a rural society into one of urban and industrial wage earners had run its course. Nineteenth-century Sweden thus forms a good case study for testing hypotheses on changing patterns of mate selection during industrialization.

Theories on changes in homogamy over time and their determinants

A certain degree of homogamy—men and women marrying someone who is similar to themselves—seems to be prevalent in all periods and all places. This has been explained by the preferences of marriage candidates for partners like themselves, by the sanctions that third parties, such as the parents and neighbors, impose on young people marrying outside their own group, and by the opportunities potential marriage candidates have to meet.  

Although it is generally agreed that homogamy still exists, it has often been concluded that it was stronger before industrialization than after.

One such claim was made by Shorter in his "sexual revolution thesis". Formulated to explain the unprecedented rise in illegitimacy in Europe from the middle of the eighteenth century, in Shorter's view the sexual revolution thesis is more generally applicable. According to Shorter, during the ancien régime the community in general, parents and peers in particular, supervised mate selection at communal dances during Christian holidays, communal work evenings (veillées in France), and the like: "There was a preference for custom over spontaneity and creativity. These little collectivities, be it the guild, the family lineage, or the village as a whole, correctly recognized that too much innovation would ring their death knell; and so they insisted [on]...the old ways of proposing marriage...Once the heart began to speak, it would give instructions often entirely incompatible with the rational principles of family interest and material survival on which the small community was ordered. Marry the woman you love, the heart might say, even though your parents disapprove".  

Tradition was to change however: "the most important change in nineteenth- and twentieth-century courtship has been the surge of sentiment...People started to place affection and
personal compatibility at the top of the list of criteria in choosing marriage partners. These new standards became articulated as romantic love". 3

Shorter refers to two mechanisms that changed partner selection during industrialization. 4 On the one hand, increasing involvement in marketplace situations and exposure to primary education led to a change in mentality. Young people wished to be free and to decide upon their own lives, especially on the man or woman they would marry. At the same time, industrialization brought economic independence for young men and women, making it much harder for parents to control their behavior. 5 Because true love is blind, says Shorter, the combination of declining parental control and the wish of young people to marry for love would lead to the disappearance of homogamy: "to the extent that endogamy decreases and people begin marrying those unlike themselves, we can speak of the advance of true love: the sacrifice of community approbation for personal happiness, the sacrifice of money for self-realization". 6

Shorter's sexual revolution thesis belongs to a school of thought denoted as modernization theory. This school has long dominated sociological research into social mobility, including marital mobility and homogamy. 7 In the field of homogamy Goode was probably the most eloquent spokesman of modernization theory. He wrote: "With industrialization, the traditional family systems are breaking down... Elders no longer control the major new economic or political opportunities, so that family authority slips from the hands of such family leaders. The young groom can obtain his bride on his own, and need not obey anyone outside their family unit, since only the performance on the job is relevant for their advancement. They need not rely on family elders for job instruction, since schools, the factory, or the plantation or mine will teach them the new skills...Nor do they even need to continue working on the land, still in the possession of the elders, since the jobs and the political opportunity are in the city. Thus industrialization is likely to undermine gradually the traditional systems of family control and exchange." 8

Clearly Shorter's notions echo those of Goode, but they are not identical. For Goode it is a change in the structure of opportunity of marriage and work, linked to industrialization, that causes homogamy to decline. For Shorter it is both a change in opportunity structure, but even more, a change in human aspirations. In his version of the sexual revolution, Western adolescents break the chains of reason and social control to follow the sirens of their true love.

Modernization theory has sometimes given rise to the argument that a decrease in homogamy with respect to social origin is not accompanied by a rise in marriages based on love, but instead by an increase in homogamy with respect to education. As a consequence of rationalization processes, the distribution of jobs is based less and less on class of origin and more and more on what people achieve on the basis of their own efforts. With this shift from ascription to achievement values on the labor market, a parallel shift would occur on marriage markets. It is less valuable to match on social origin, while the pay-off is higher for a match on a good education. 9

Besides changes in preferences and in parental control there are two other potential reasons for the change in homogamy during industrialization. First, industrialization may affect opportunities to meet people with different characteristics, and, in part, homogamy is thought to be the result of differences in meeting opportunities. 10 Young people are more likely to meet others from their own social background, of a similar age, religion, and education, than they are to meet people who are greatly different in these respects. This was particularly true in the pre-industrial period, when few youngsters attended school—and those who did were highly selective, mostly coming from the
higher classes—when there were stronger norms governing whom it was considered appropriate to interact with, and when means of communication and travel were less developed and not available to everyone. The expansion of education during industrialization may not only have changed marriage preferences, but also enlarged the meeting opportunities of young people from different social groups.

Secondly, changes in the incidence of homogamy may be caused by changes in the size of groups, assuming social groups differ with respect to their preference for homogamy. 11 If a group with a strong preference for homogamy grows in size, the total homogamy of society increases. Kalmijn showed for instance that the decrease in homogamy with respect to social origin in the United States during the second half of the twentieth century was caused solely by the decrease in the size of the farming class. 12 Because the period of industrialization was characterized by great changes in the class structure, this explanation might be especially relevant for changes in homogamy during this period. [End Page 103]

Clearly, an increase in the proportion of grooms marrying a bride from a different social class is consistent with the thesis of a sexual revolution, but it can also be explained by changes in meeting opportunities and class sizes. There are, however, ways to differentiate between at least some of the potential explanations. In this article, population registers will be used to create cross-tabulations of the occupational class of the father of the bride and of the father of the bridegroom for several points in time. These tables will be analyzed to investigate whether homogamy with respect to class of origin diminished during industrialization. Total mobility percentages will show whether the phenomenon of interclass marriages became more common over time. However, relative mobility analysis will provide a more rigorous test of Shorter's sexual revolution thesis, because it enables one to look at changing marriage patterns after taking changing class sizes into account. We can come even closer by comparing the relative homogamy of men and women from complete and incomplete families of origin. There is no reason to expect that the preferences or meeting opportunities of these men and women differed. However, it is very likely that parental control was stronger in complete families than in incomplete families. If we find that relative homogamy not only increased over time but also differed between couples from complete and incomplete families, this would indicate the existence of changes in homogamy caused by a decline in parental control. For an even better test of the sexual revolution thesis, we should also be able to distinguish between changes in preferences and changing meeting opportunities, but we see no possibility of being able to do so with the data at hand.

To increase our understanding of the possibilities young nineteenth-century Swedish men and women had to meet and marry partners of their parents' or their own choice, this article first presents a study of the ethnographic material.

**Ethnographic data on courtship and marriage**

How did boys and girls in northern Sweden meet their future spouses? Did parents closely supervise the mate selection of their children? Patching together diverse pieces of information, some traits of traditions of courtship and marriage in rural areas can be sketched. No information on such practices in the town of Sundsvall exists however.

After reaching the age of confirmation, youths in Protestant parts of Europe were generally deemed ready to court. 13 Sweden was no exception to this rule. At the age of 15, sometimes later, children
were confirmed as full members of the Lutheran church, and at 16—17 for girls and 18—20 for boys they were deemed to have reached the age of courtship. Unmarried youngsters would have met long before the age of courtship, either on the farm, during work evenings in the village, as members of local fraternities, in the fields during sowing and reaping, at feasts and fairs, in Church on Sundays during Mass, or at schools. Elementary schooling was compulsory after 1842, but it took some time before adequate provisions, in the form of buildings and teachers, became available. In northern Sweden it was not uncommon for a dozen or more villages and hamlets to share a church.

Work evenings—they are sometimes referred to by the French term veillées—were common throughout Europe. In the long winter evenings the unmarried girls of the village, their mothers, and potential suitors, would join one another in a communal barn to work, mostly to spin, sing and talk, perhaps dance, and to eat and drink. What the ballroom was for the urban jeunesse dorée, was the veillée for rural populations, except that the former had leisure, while the latter also had to work. It is often said that marriages were made in the veillée: "the spinning-room gave the lads an opportunity to observe the girls' abilities at what would be one of their most important tasks in the household. In a traditional rural society, such criteria were extremely important for the choice of a partner".

In northern Sweden the veillée was particularly important, perhaps due to an abundance of long winter evenings. Girls spun, chatted among themselves and with the boys, ate cheese, drank brandy and beer, and danced. If a girl liked a boy, there were many ways to let him know, from glances, via go-betweens, to flirting, sitting on his lap at the dance, and accepting small gifts, such as a ring or a wooden spoon carved by the boy. For the latter to happen, things had to be serious of course.

Festivals were prime occasions to look for a partner: Christmas, Michaelmas, Midsummer Night, Easter, harvest festivities, and, most certainly, weddings. On the night of a wedding it was customary for unmarried boys and girls to sleep in a communal barn, on a floor covered with straw. They chatted, danced, played cards and drank until the early hours. Sometimes the "straw dancing" (halmdansen) lasted until three or four o'clock in the morning. From the region of Skellefteå—north of the Sundsvall region—it is reported that the girls went to bed first. Later came the boys, carrying burning pieces of wood for light. Sometimes the married men assisted with a smoldering piece of coal. If a boy was attracted to a girl, he would put his hand under her blanket. If she in turn pressed her hand against his, the boy was allowed to lie down beside her, albeit dressed, as was the girl. All this took place in the presence of the others. This custom was part of a tradition that has long fascinated ethnographers and historians alike, that of bundling (nattfrieri), organized by the rural fraternities.

We are particularly well-informed on the activities of Swedish rural fraternities in general and on bundling in particular, thanks to Wikman's ethnographic study. In a 400-page dissertation, Wikman described the results of both his reading of the ethnographical literature as well as his study of relevant archival material, and, even more importantly, the surveys he had conducted among the elderly in Sweden. His work is well worth discussing here; above all because it is particularly pertinent to the subject of this article. Invaluable qualitative material is presented on courtship practices all over Sweden, excepting the far south and the deep north of Lapland. Some of the examples also relate to villages involved in the data studied here. Furthermore, his material sheds light on a tradition common in many parts of Europe. Surprisingly then, Wikman's study of Sweden has yet to receive the attention it deserves, possibly because it was written in German.
There are also a few caveats. To begin with, Wikman's study is stronger on the rules of bundling than on the way the rules were applied, transformed or bent, although it also provides many examples of the practice of bundling as well. Furthermore, while the study does not state this explicitly, the overall presentation of the material may easily give the unwary observer too romantic a picture of a paradise of unproblematic sexual relations between adolescents. Lastly, the study does not allow us to estimate the proportion of all rural youths who were engaged in bundling, and it may be that Wikman has exaggerated its incidence in the nineteenth century to some extent.

Wikman portrays the custom of bundling—the nightly visits by boys to girls in their house—as part of the activities of rural fraternities, which existed all over rural Europe and which regulated courting practices. Through unwritten, but nonetheless well-known, and compelling "stages", courting went from the communal to private, from private to serious, from serious to intimate, and in the end to marriage. Bundling is seen as a step on the road to marriage, "a prelude to marriage" as Wikman terms it. Far from bundling being testimony to sexual permissiveness or wanton pleasure-seeking, he sees it as regulating sexual behavior: "Überall wo der Kiltgang als Sitte herrscht, ist er mit der Forderung der Keuschheit im Verkehr zwischen den Geschlechtern verbunden. Ein verstoss gegen die sexuelle Sittlichkeit...war...oft gleich bedeutend mit den Ausschluss aus dem sozialen Kreis der Jugend und dem hiermit verbundenden Verlust des Ansehens." 24

After having reached the age of courtship—sometime after confirmation—farmers' sons were allowed to join a rural fraternity of older boys, who assembled in the village to wander, talk, play cards, engage in mischief and court. A fine occasion for joining was Michaelmas, or another rural feast such as Easter or Walpurgis night. 25 A membership fee was paid to enable the fraternity to finance its needs, notably beer and brandy. 26 A young man could remain a member either until he married or reached the age of 30 or so, and in fact he could not refuse to become a member without being ostracized. 27 The group could number between a handful and a few dozen, depending on the size of the village. Its members were rarely recruited from outside the village, and certainly never from beyond the boundaries of the parish. They met up every Saturday night. 28 Together, they would call upon the girls, again rarely going beyond their own village, and most certainly respecting the boundaries of the parish. 29 Boys defended their territory by beating up other boys, outsiders, who came to court, by extracting a fine or some brandy from them, by putting them on display on a cart, or by tearing up the mattress of the girl he had been courting and putting the straw on top of the roof of her house. 30 The girls of their village were theirs to visit, and theirs alone. The boys visited the girls either at their home or, in summer, in the sheds in the pasture. Regardless of whether they were the farmers' daughters or servants (usually daughters of another farmer), girls were more likely than not to live outside the farmstead in a shed (the pigbod) or part of the stables, the attic for example, where it was warm in winter. 31

After begging to be admitted—knocking in a certain pattern, singing, a ritualized question and answer game—the boys enter the girl's room. 32 They chat, play cards, play the flute or the harmonica, and drink. Meanwhile one of the boys—chosen in advance—asks the girl if he may stay—"fria när dig?" or "får jag ligga hos dig i natt?"—or makes his intentions clear in some other way, through a go-between or by sitting on her bed. The girl says yes or no, or signals her intent in another manner, for example by turning her back on him, or, if she finds him attractive, by hiding his cap under her bed. After she has picked a boy, all the rest leave to continue their round.

The remaining boy and girl lie together on her bed, the girl under the blanket, [End Page 106] the
boy next to her but on top of the blanket. Both are dressed. The boy is allowed to remove his jacket, shirt and shoes but is expected to keep his pants, undershirt and socks on. They might talk about work on the land, the behavior of other boys and girls, make music and drink. After a while they fall asleep, after a long day's work. Early in the morning, the boy leaves, while the farmstead is still asleep: no one need have seen anything. If the couple decide they do not really fancy one another, they will choose other bundling partners next time. If it suits them to continue, they do so. When it becomes serious—in their eyes as well as their peers—they exchange symbolic gifts. The boy carves decorative wooden spoons, the friarskedarna or lover's spoons. The girl may knit some stockings or a handkerchief. If their relationship is going "well" (väl), "steady" (visst), or is "certain" (säker), they may then extend sharing one another’s company to include the Wednesday night, or even Sunday night. The farmer might invite them over to have breakfast at the farmstead. At some point of course, the boy has to visit the father of his prospective bride to make clear his intentions. If it seems certain that they will marry, the boy may be allowed to lie next to the girl under the blanket. It is conceivable that they will remove a few more layers of clothes. In the end, depending on the wishes of the girl and her parents, it is even conceivable that the couple will have intercourse once their relationship takes on the appearance of a marriage and they are simply waiting for the right moment to wed. In itself pregnancy was not associated with shame, provided the couple planned to marry. If they failed to marry, the boy’s reputation and that of the girl would be ruined. In districts dominated by more extreme Lutherans, such as the west coast and the southeast of Sweden, the girl would be regarded as a whore and could be forced to wear a whore's cap. It is doubtful if this also occurred in northern Sweden.

So much for the rules. Could the boys and girls resist temptation? Sometimes not. Often, however, Wikman says, they could. Wikman stresses that bundling did not lead to a spate of births out of wedlock, fruits of a single night of passion so to speak, though it could give rise to conceptions before marriage, legalized at, and sanctified by, a subsequent marriage. The social control exercised by the rural fraternities and parents apparently disciplined boys not to breach the rules before a marriage was planned. A pregnancy in any case meant marriage, whether it was intended—as custom ordained if a relationship had become so intimate—or not.

Wikman's study suggests then that partner choice in rural northern Sweden was to a fair extent regulated at veillées and by rural fraternities by bundling. A high degree of social control was exercised by parents and peers, as can be seen from the fact that bundling usually led to marriage and not to sexual permissiveness or high rates of single mothers. Both customs probably generated a high degree of social and geographical homogamy. In the course of the nineteenth century, however, the proportion of the population covered by rural fraternities and bundling declined. Wikman and Shorter claim this was caused by the influx of strangers working for the lumber industry and the railroads. The decline of bundling may have led to less homogamous marrying. If so, it was a structural factor—an effect of the changing composition of the labor force—and not a cultural change: more Goode than Shorter.

Cross-tabulations of social origin of brides and bridegrooms

"These are illustrations, not verifications. (...) Are these testimonies, then, sufficiently representative? Any imaginable case could be 'documented' by scissoring together quotations (...). How can we capture the central tendency, the representative experience that the average young person had with romance? One kind of data permitting the verification of larger hypotheses is who marries, or impregnates whom. (...) I argue that the willingness to abandon endogamy—marrying
within one's own social bracket or village—presents such a test". We will follow up Shorter's advice not to rely solely on ethnographic material, and we will test the hypothesis on the effects of industrialization quantitatively by looking at long-term trends in homogamy.

We will view homogamy here as an essentially two-dimensional phenomenon, focusing on the social origin of bridegroom and bride. Social origin can either be indicated by income or wealth, or, much more commonly for past populations, occupation, and it is this indicator that will be used here. This method has its virtues. To begin with, not much information is required and this makes for a wider applicability of this type of analysis. We will also use log-linear models. These allow us to condense the relevant patterns in the marriage tables into one or just a few parameters. In addition, these models allow one to dissect the observed homogamy patterns into a component relating to the marginal distributions of a table and to components relating to the association in the table, net of the effect of these marginal distributions. The first reflect changes in the marriage or labor markets. The latter include other processes, such as a drift in the motivation behind partner choice, and is often referred to as relative mobility or social fluidity. Finally, since these models allow one to formulate testable hypotheses relating to parts of the marriage table, they also allow one to test suppositions regarding some of the determinants of marriage, such as differences according to social group or sector. In short, these models are widely applicable, can be relatively easy to interpret, and make efficient use of the data.

Nordic data have long been familiar to historical demographers because of their high quality. Registers of births, deaths and marriages exist, as they do for elsewhere in Europe in the nineteenth century. A peculiar source, the Husförhörslängder, contains information commonly available in population registers, as well as other, ecclesiastical, information relevant to the local Lutheran priest who kept the registers. Together with lists of migrants, these sources contain data on most demographic and quite a few social phenomena for all persons resident in the area.

Over many years, and with admirable energy, the Demographic Database (DDB) in Umeå has collected data from the sources mentioned for the nineteenth century for a large area in northern Sweden, the province of Västernorrland. This area consists of the town of Sundsvall and its large hinterland, demarcated by the coastline and the rivers Indalsälven to the north and Ljungan to the south. For our purposes, information on all men who reached the age of 15 was extracted from the computerized files of the DDB. A further selection was made of those who married for the first time in the region between 1800 and 1889 (N=16,497). For these married men the occupations of their father and father-in-law were noted from the Husförhörslängder. For 5901 bridegrooms occupational information on both the father and father-in-law could be found in the sources. Sometimes, however, the occupation related to a period long before the son married. Where the occupational information on the fathers and fathers-in-law was recorded more than five years before their child married, such cases were excluded. The final number of cases is therefore 5472.

Missing data on social origin are mainly linked to immigration. Where men migrated to the region without their parental family, or married women who did so, data on their father or father-in-law are often lacking. The marriage behavior of men and women from an unknown social origin differs from that of individuals with a known social background (Table 1). Men and women whose social origin is known married the offspring of farmers more often than they married the offspring of unskilled workers (for example, 41.8% of women with a known social background married a farmer's son, compared with only 29.8% of women with an unknown social background). There are at least two
explanations for these differences. First, the class distribution of the fathers whose occupation is unknown may differ from the observed class distribution. If we assume that there is homogamy, this would mean in our case that children of farmers are overrepresented in our sample and the children of unskilled workers are underrepresented. This could very well be the result of differential migration. If this were the sole explanation of the observed differences, most of our analyses would not be affected by the exclusion of men and women with an unknown social background, because the parameters of log-linear models are insensitive to changes in the size of the classes.

However, there is a second explanation for the differences in marriage behavior. It may be that farmers did not want their children to marry migrants—irrespective of their class of origin—and that unskilled workers were indifferent to or even preferred migrants. In that case the total degree of homogamy would be larger in our sample than among all marriages that took place in the Sundsvall region. Since the percentages of men and women with an unknown social background increased over time (by 16% and 12% respectively), this would result in a larger difference between our sample and the population over time.

All told, two things stand out. First, the conclusions are in any case valid for the stable population of the region, i.e. second-generation inhabitants of the Sundsvall region. Second, if conclusions are generalized to cover the whole population one should keep in mind that the data are somewhat favorable to hypotheses predicting change.

The abundance of sources has a few happy consequences. The number of cases is large, especially for the second half of the century, thus allowing one to document changes over time. Furthermore, the combination of sources documents a larger segment of the population than marriage records alone do. Of course the data, however abundant, still omit those who left unmarried, married elsewhere and did not return. Unlike the marriage records, however, the other sources also give information on the occupational status of fathers no longer alive when their child married. This was a common phenomenon in nineteenth-century Sweden—in 58% of the 5472 cases either the father or the father-in-law had died before their child married. This is a strong advantage of the data, since they allow us to distinguish between the different mechanisms underlying changes in rates of homogamy. Separate marriage tables have therefore been created for the two groups. If parents influence the choice of their children’s marriage partner, homogamy should be stronger where both fathers are alive and weaker where at least one is not.

It has already been noted in passing that occupation will be used to measure parental status at marriage. Alternatives such as income or wealth are not available. Even if they were, one might still prefer occupation because it is an important marker of social position and a fair guide for parents to rely on when considering a potential partner for their child. Using the scheme developed by the Demographic Database, eight social classes are distinguished: large entrepreneurs, higher officials, small entrepreneurs, lower officials, farmers, skilled workers, unskilled workers, and farm workers. As the number of cases in some of these classes is small, in the homogamy analyses the first four classes have been combined (see Table 2).

Changes in the distribution of the male labor force aged 15 and older are given in Table 3. The dissimilarity index—a measure of the total degree of structural change—clearly shows the consequences of the industrial revolution. It rises from 4.4% (comparing 1830—39 with 1840—49) to 10.7% a decade later, and to 18.0% for the last two decades in the table. The dissimilarity index also shows a considerable amount of change at the beginning of the nineteenth century. Most
notably, the number of farm workers increased from around a third to a half of the adult male labor force between 1800 and 1819. Major developments in the second half of the century included the relative decline in the size of agricultural groups—farmers, crofters and farmhands—and the growth in the number of unskilled workers. Less startling, but nevertheless worth mentioning, was the gradual growth in the relative importance of white-collar occupations, though the numbers involved were small even by the end of the century. [End Page 109] [Begin Page 113]

Total homogamy

Table 4 gives the number of brides and bridegrooms marrying within their own social group, as a percentage of all brides and bridegrooms. Of course these percentages are dependent in part on the number and type of classes chosen, and thus not particularly informative. They do, however, reveal three things worth bearing in mind. First, at no point in time was northern Sweden an immobile society. More than half of all young women and men married outside their own social class. Second, total homogamy did not change consistently over time. There was no clear correlation with industrialization, which was absent in the first period (1800—49), began in the second (1850—59), grew in the third (1860—69) and fourth (1870—79) and stabilized in the last decade (1880—89). 44 This apparent stability is all the more remarkable if we keep in mind that the data may be biased towards increasing heterogamy, as discussed in the data section. Third, brides and bridegrooms were less likely to marry within their own social group if their father was no longer alive at the time of their marriage. The difference was small though.

Let us take data on marriage couples whose father and father-in-law were still alive as an example in order to discuss differences between classes and developments over the century (Table 5). 45 Outflow rates are presented first. These outflow rates indicate the percentage of all bridegrooms in a certain class of origin who ended up in their own class—in which case they married homogamously. At the start of the period, the most homogamous groups were the sons of farmers (II), and to a lesser extent those of crofters and farm workers (V). If farmers' sons did not marry within their own class, they were most likely to marry the daughter of a crofter or farm worker. The reverse was also true. The most heterogamous were the sons of skilled workers (III) and unskilled workers (IV). These two [End Page 113] groups often married into the farming classes. Over time, only one class showed a considerable change in marriage behavior: the sons of unskilled workers increasingly married within their own class.

Inflow rates indicate from which classes the family of the bride accepted a bridegroom (see Table 5). These rates present more or less the same picture as the outflow rates. This need not necessarily have been the case. Gender or class differences in the percentages remaining unmarried can in particular cause different homogamy patterns between sons and daughters who do marry. However, in nineteenth-century northern Sweden the marriage behavior of sons and daughters was rather similar.

The increasing homogamy of sons and daughters of unskilled workers does not per se contradict the sexual revolution thesis. It could also be explained by [End Page 114] the increasing numbers of unskilled workers. In the next section the influences of group size will be taken into account.

Social fluidity: simple models
The total percentage of homogamous marriages is directly affected by changes in the occupational distribution. If the relative sizes of classes with a strong tradition of homogamy—e.g. farmers—decline, the homogamy of society as a whole will tend to decrease. Similarly, the size of an occupational group may itself influence opportunities for marrying homogamously. Especially for members of very small classes—such as the unskilled at the beginning of the nineteenth century—it may be difficult to find a partner of the same class. To test Shorter's sexual revolution thesis we need to eliminate the effects of the size of occupational groups and try to measure the tendency to marry within and outside the same class independently of the opportunity structure.

In this section log-linear models will be used to study this "social fluidity". In the first set of models we do not try to model precisely the observed pattern of social fluidity—i.e. who marries whom if the opportunity structure does not differ between individuals; we ask only whether it changed over time (Table 6). Models developed by Erikson and Goldthorpe, and Xie are used. 46 The simplest model is the constant social fluidity model. In this model the pattern of social fluidity is constant over time and the same for marriage partners whose fathers were still alive at their marriage and for those whose fathers had died by then. In other models possible differences between the association parameters of some of the marriage mobility tables are described in a "uniform" way. The uniform differences approach means that the association in the whole table (that is for all combinations of classes of fathers and fathers-in-law) becomes either weaker, indicating decreasing homogamy, or stronger, indicating increasing marriage mobility. Differences over time are captured by four parameters comparing the reference table for 1800—49 with the tables for later decades. Differences between marriage partners with and without living fathers are captured by one parameter comparing the five tables referring to marriages while the father was alive with the five other tables.

To choose between the models, the frequencies observed in the mobility tables are compared with the frequencies predicted by the models. One aim is to find the model with the least error, where error is the difference between observed and predicted cell frequencies. The error measure is given in the tables under the heading L2. The higher the L2, the greater the error. The other aim is to find a simple model rather than a more complex one. The measure of complexity is given in the tables under the heading df, short for degrees of freedom: the simplest model has the highest number of degrees of freedom. The choice of model is made by seeing if the reduction in error is significant given the difference in complexity. In other words, when comparing the models one decides whether the gain represented by an increasing similarity between data and model outweighs the loss of parsimony.

The models of uniform difference in Table 6 show that in general it is not true that there was more romantic love later in the nineteenth century than earlier. Models allowing differences in association between years fit less well than models [End Page 115] that assume a stable association over time. Furthermore, the "change parameters" in the models are never significant at the .05 level. However, brides and grooms whose fathers had died were more likely to marry someone from another class than marriage partners whose fathers were still alive were. 47 This suggests the importance of parental control, or parental resources, but there is no evidence of such importance diminishing in the nineteenth century.

Social fluidity: topological models

A disadvantage of these global models is that they do not show what barriers to marriage mobility actually existed. How strong was the tendency to marry within one's own social class, and was this
tendency especially strong for classes owning means of production (the upper, middle and farming classes)? Were children from classes of approximately the same social status more likely to marry each other than children from classes that were far apart? Were there fewer marriages crossing the agricultural to non-agricultural barrier than within each of these sectors?

To answer these questions these barriers are modeled in so-called topological models. The three barriers to heterogamy are described by inheritance, sectoral, and hierarchy parameters. The inheritance parameters model a tendency to marry within one's own social class. Positive parameter estimates indicate that such a tendency exists. We investigated whether inheritance is similar for all social classes. The sectoral barrier to mobility distinguishes mobility moves between the agricultural and non-agricultural sector from moves within each sector. Negative parameter estimates indicate that it is difficult to cross sectoral borders. The hierarchy parameter models whether brides and grooms marrying outside their class of origin tended to marry someone from a class of a similar social status. With the data at our disposal, it is impossible to be exact about the social status of all five classes. It seems especially difficult to decide whether farmers were lower in status than the members of the upper and middle class and whether the status of farm workers differed from that of other unskilled workers. However, one may assume that farmers and the upper and middle class had a higher status than skilled workers, and that skilled workers had a higher status than the unskilled and farm workers. The hierarchy parameter describes how difficult it is to cross one of these status barriers. A negative parameter indicates that status barriers existed.

The models are shown in Table 7. Model 8 fits the data best. This model describes the nineteenth-century relative marriage mobility chances as restricted by inheritance and by sectoral and hierarchical barriers. The children of the upper and middle class and to a lesser extent those of farmers were very likely to marry within their own class, thus preventing a loss of status. Even after taking into account their low position within the hierarchy and the sectoral barrier preventing them from entering the agricultural classes, the children of unskilled workers were very likely to marry within their own class too.

Although the uniform difference models have already shown that there was no general increase in "romantic love" in northern Sweden during the nineteenth century, some of the marriage mobility barriers may nevertheless have become weaker over time. Furthermore, the earlier results pointed to weaker barriers for fatherless children compared with children whose father was still alive when they married. In the following analyses, these assumptions are tested. Model 8 is the reference model. It is first compared with models allowing for a difference between children with and without a living father (see Table 8); after that, we examine whether models allowing for differences over time fit the data better.

All models in Table 8 indicating that the death of the father led to more freedom for the children in partner choice (and as a consequence more marriage outside the class of origin) do indeed fit better than the reference model. Model 10 fits best. Unreported parameter estimates of this model show that couples without a living father or father-in-law were more likely to cross the sectoral border than couples with two fathers who were still alive. This supports the idea that the Swedish nineteenth-century marriage market was strongly regulated by social control. Having established this, model 10 becomes our reference model; the question then is whether this model can be improved upon by allowing change over time.
In general, the models allowing mobility barriers to change over time are no better than the stable models, with the exception of model 14. This model clearly fits the data better than model 10, and thus becomes the preferred model. The parameter estimates of model 14 show a significantly more negative sector parameter for the period 1880—89. This means that marrying across sectors was even more difficult at the end of the nineteenth century than in the decades before. One may speculate about the reasons for this change: perhaps the social position of farmers declined over time, leading to a "lock in" for "residual" farmers. However, it definitely does not support the hypothesis of decreasing barriers to inter-class heterogamy over time.

Conclusion:
Was there a sexual revolution in northern Sweden in the nineteenth century?

Is the development of partner choice—as reflected in courting traditions and homogamy—evidence of a sexual revolution? Rural courtship patterns did become increasingly irrelevant for the mass of the population, as northern Sweden was transformed from a country of peasants, so to speak, into one of laborers working in the sawmills, offices and shops of Sundsvall. This meant that courtship was decreasingly regulated by rural fraternities. Bundling, with its clearly marked stages from communal nightly visits to intercourse as a prelude to marriage, continued until well into the twentieth century, but its days were numbered. This change should not be taken lightly. For the mass of the population it did imply a departure from established patterns of marriage and courtship.

The consequences should not be overemphasized however. Changing traditions were not reflected in consistently higher proportions of men and women marrying outside their social class. Even after taking changing group sizes into account, there were no signs of decreasing homogamy. On the contrary, some barriers to heterogamy actually seemed to become stronger at the end of the nineteenth century. Thus the data do not support Shorter's theory of an increase in romantic love. Nor for that matter do they support other hypotheses predicting a decline in homogamy due to changing opportunities to meet, weaker parental control, or changes in class distribution. A comparison of the marriage behavior of men and women from complete and incomplete families did reveal the importance of parental control. The influence of parents did not decline over time however. No burst of sexual energy and romantic love blasted the walls of tradition defended by elders and parents eager to maintain their patriarchal hold on the young in northern Sweden in the nineteenth century.

Appendix: Parametrization of topological models

Hierarchy
1 1 2 2 2
1 1 2 2 2
2 2 1 2 2
2 2 2 1 1
2 2 2 1 1

Inheritance 1 (one parameter for immobility)
2 1 1 1 1
1 2 1 1 1
1 1 2 1 1
1 1 1 2 1
1 1 1 1 2

Inheritance 2 (one parameter per class for immobility)
2 1 1 1 1
1 3 1 1 1
1 1 4 1 1
1 1 1 5 1
1 1 1 1 6

Sector (agricultural versus non-agricultural)
1 2 1 1 2
2 1 2 2 1
1 2 1 1 2
1 2 1 1 2
2 1 2 2 1

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Endnotes

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11. For a comparison of the difference between total and relative intergenerational mobility, see M. Hout, *Mobility Tables* (Beverly Hills, 1982).


20. Skellefteå was mainly rural and differed in certain respects from the Sundsvall region: it had a later industrial development and a stronger religious tradition.


23. Wikman, "Die Einleitung der Ehe," p. 264 presents a map showing the geographical incidence of this tradition in Europe.


35. Although Sweden differed from some other European countries in having such a strong tradition of partner choice through bundling, it did, according to Shorter, conform to what he describes as a "sexual revolution" and thus is an apt testing ground: "At any given time, the custom of betrothal license makes Scandinavia quite different from France or Ireland. But Scandinavia had undergone the same historical evolution towards liberality." Shorter, The Making of the Modern Family, p.106.

36. As noted earlier, we do not know the numerical incidence of bundling, i.e. what proportion of all youths were involved in the activities of fraternities.

37. Wikman, "Die Einleitung der Ehe," pp. 5, 284-286; Shorter, The Making of the Modern Family, pp. 104-105. Although the decline in bundling is undisputed, its causes remain obscure. For Finland, for instance, quite another explanation is given: the introduction of the bicycle.


39. See P. Borscheid, "Romantic love or material interest: choosing partners in nineteenth-century Germany," Journal of Family History 11 (1986): 157-168, for a similar attempt. Borscheid uses wealth homogamy rather than homogamy of social origin; nor does the author use log-linear models to dissociate total from relative homogamy, as we have done.


42. The DDB has also collected data for Skellefteå, which is part of the province of Västerbotten. Both Västerbotten and Västernorrland are part of what is called Norrland, which is not an administrative region but more a general geographic name: Sweden is often divided into three parts: Götalands, Svealand and Norrland.

43. In another part of Sweden these migrants were traced. It was found that they were more likely to marry than those who stayed, the more so for women than for men. See B. Kronborg and T. Nilsson, "Social mobility, migration and family building in urban environments," in: S. Åkerman et al., eds, Chance and Change: Social and Economic Studies in Historical Demography in the Baltic Area (Odense, 1978), pp. 227-237, and especially 233.

44. For data on the amount of wood exported and the number of sawmills, see F. Hjulström, G. Arpi and E. Lövgren, Sundsvalldistriktet 1850-1950 (Uppsala, 1955), pp. 220-221, and H. Wik, Norra Sveriges Sågverkindustri från 1800-talets mitt fram till 1937 (Stockholm, 1950), pp. 200-209.

45. The results are similar for children of deceased fathers.


47. The same effect has been reported by F. van Poppel, J. de Jong and A.C. Liefbroer, "The effects of paternal mortality on sons' social mobility: a nineteenth-century example," Historical Methods 3 (1998): 101-112. See also, M. Delger and J. Kok, "Bridegroons and biases: A critical look at the study of intergenerational mobility on the basis of marriage certificates," Historical Methods 3 (1998): 113-121, esp. 120.


49. This was not true for the offspring of skilled workers and farm workers, who were more likely to marry outside their class of origin. This cannot be explained by their small size, since these models refer to relative mobility, i.e. differences in the marginal distributions of the tables, reflecting the relative sizes of classes, have been taken into account.