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Diverse Marriage Patterns in Imperial Germany

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Abstract

Based on the German census of 1900, this article describes marriage patterns in Imperial Germany. The general marriage pattern did not markedly deviate from the "European" one. Nevertheless, the analysis uncovered interesting geographical variation. The male pattern presented differentiation between eastern and western Germany, with levels of male permanent celibacy being lower in the eastern parts of the Empire. However, the extent of female permanent celibacy was great, especially in Prussia. This is probably associated with a dearth of males at marriageable ages due to historical circumstances (migration and wars that decimated young males) in the 1860s and early 1870s.

Keywords

European marriage pattern, permanent celibacy, availability of mates, Imperial Germany, singulate mean age at marriage

The study of Germany in the early modern period provides the opportunity to observe great regional and spatial differences in the demographic characteristics of a population. Although in the present day Germany may be regarded as a homogeneous nation as far as its language and culture is concerned, in reality the German nation was formulated by various ethnicities with different linguistic, religious, and cultural characteristics. Many of these differences are due to the diverse history of its numerous constituent states and territories, many of which were largely independent. The forerunner of the modern German state was founded in 1871 with the initiative of the then chancellor of Prussia Otto von Bismarck and was named German Reich or Imperial Germany or German Empire. The dominant political power in the newly founded German Empire was Prussia, but its territory also included large areas of the present-day Poland, a part of France (Alsace-Lorraine) and the entire present-day Germany with its numerous culturally and linguistically diverse states (Bundesstaaten). In Saxony, for example, Protestantism was the main religious denomination, but the monarchs of the Kingdom of Saxony were Catholics, which might have affected the household structure and the marriage pattern of Saxony. In Bavaria, on the other hand, the majority of the population was Catholic, and it remains to be investigated whether this fact had any impact on the marriage pattern of Bavaria.

One of the best-known typologies of the marriage patterns of early modern Europe remains that of Peter Laslett.[1] He divided Europe into four regions, each one corresponding to a particular

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tendency of domestic group organization. These regions, which are very vague as far as their geographical delineation is concerned, are labeled ''West European,'' ''West/central or middle,'' ''Mediterranean,'' and ''East European.''

Although this classification refers mainly to household structures, some information on marriage patterns can also be extracted. Thus, the ''West European'' marriage pattern is the one described by Hajnal as European, which prevailed in ''Europe'' from at least the seventeenth century until the beginning of the twentieth century. The distinctiveness of this pattern resides in the fact that people were getting married at a high average age (over twenty-three for women) and that there was a high proportion of the population (usually over 10 percent) who never married at all. According to Hajnal, this pattern was dominant in the part of Europe that lies west of an imaginary line running roughly from Saint Petersburg to Trieste.[2] The main addition made by Laslett is that the age gap between spouses was narrow in that pattern. The ''West/central or middle'' marriage pattern is similar to the ''West European'' one. The difference was in the household structures of the two regions and is underlined by the fact that in the ''West/central or middle'' region, extra work groups were attached to the family, thus resulting in a high proportion of stem family households accommodating a number of inmates. The ''Mediterranean'' marriage pattern is characterized by low age at marriage for females and high for males, large age gap between spouses, high proportion of widows, who usually remain unmarried, and overall by a low percentage of population who never married at all. The ''East'' pattern shares the same characteristics as the ''Mediterranean'' one but exhibits one basic difference: age at marriage is low for both females and males and the age gap between the spouses is narrow. Otherwise, the proportion of the population married is similarly low as in the ''Mediterranean'' pattern and widows, although proportionately fewer, usually do not remarry.

When Laslett proposed the above classification, the ''West'' model (and its variant ''West/central or middle'') was thought to be the rule in pre–Second World War northwestern Europe. However, later on, it became clear that the characteristics of this pattern were not uniform throughout northwestern Europe. This was pointed out by more recent studies on France, Spain, Italy, and Portugal,[3] which revealed a great variability in these areas as far as household structures and marriage patterns are concerned.

Given the multicultural nature of Imperial Germany, we aim to answer the following research questions: Does the marriage pattern of Imperial Germany fit in the typology proposed by Laslett? Were there geographical differences in this pattern within Germany, and if yes, what were the reasons for these differences?

Methodology

We make use of the 1900 census returns[4] to investigate the spatial variation of marriage patterns in the German Empire. The geographical unit of analysis in this study is the federal states (''Bundesstaaten'' in German) as these are delineated in the 1900 census. Due to the plenitude of states and in line with the methodology of the census, we merged the duchies (Anhalt, Braunschweig, Sachsen-Meiningen, Sachsen-Altenburg, and Sachsen-Coburg-Gotha), the principalities (Reuss aeltere Linie, Reuss juengere Linie, Schwarzburg-Rudolstadt, Schwarzburg-Sondershausen, Lippe, Schaumburg-Lippe, und Waldeck), and the Hanseatic cities (Hamburg, Bremen, and Luebeck) as ''small states'' (Kleinstaaten) and thus created twenty-two geographical units, as can be seen in the Figures and in Table 1.

The marriage patterns are considered here in terms of (1) singulate mean age at marriage (SMAM), calculated as suggested by J. Hajnal;[5] (2) age gap between spouses, calculated as male SMAM minus female SMAM; and (3) permanent celibacy, defined as the percentage never married by age 50. In all cases, the two sexes have been treated separately because usually age at first marriage is later for males.

Table 1. Geographical Units Shown in Figures (the Numbered Ones) as Delineated in the 1900 Census.

	German name	English translation
	Staaten und Landesteile	*States and Regions*
No.	*Preussen Bundesstaaten*	Prussian federal states
1	Ostpreussen	East Prussia
2	Westpreussen	West Prussia
3	Berlin	Berlin
4	Brandenburg	Brandenburg
5	Pommern	Pomerania
6	Posen	Posen
7	Schlesien	Silesia
8	Sachsen (Magdeburg)	Saxony (Magdeburg)
9	Schleswig-Holstein	Schleswig-Holstein
10	Hannover	Hannover
11	Westfalen	Westphalia
12	Hessen-Nassau	Hessen-Nassau
13	Rheinland	Rhineland
14	Hohenzollern	Hohenzollern
	Deutsche Bundesstaaten	German federal states
15	Bayern	Bavaria
16	Sachsen (Dresden)	Saxony (Dresden)
17	Wuerttemberg	Wurttemberg
18	Baden	Baden
19	Hessen	Hessen
20	Oldenburg	Oldenburg
21	Elsass-Lothringen	Alsace-Lorraine
22	Mecklenburg-Schwerin	Mecklenburg-Schwerin
23	Mecklenburg-Strelitz	Mecklenburg-Strelitz
24	Kleinstaaten	Small states
	Braunschweig	Braunschweig
	Sachsen-Meiningen	Saxony-Meiningen
	Sachsen-Altenburg	Saxony-Altenburg
	Sachsen-Coburg-Gotha	Saxony-Coburg-Gotha
	Sachsen-Weimar	Saxony-Weimar
	Anhalt	Anhalt
	Schwarzburg-Sondershausen	Schwarzburg-Sondershausen
	Schwarzburg-Rudolstadt	Schwarzburg-Rudolstadt
	Waldeck	Waldeck
	Reuss aeltere Linie (Reuss-Greiz)	Reuss (Reuss-Greiz)
	Reuss juengere Linie (Reuss-Schleiz)	Reuss (Reuss-Schleiz)
	Schaumburg-Lippe	Schaumburg-Lippe
	Lippe (Detmold)	Lippe (Detmold)
	Luebeck	Lubeck
	Bremen	Bremen
	Hamburg	Hamburg

Source: German census 1900.

At technical level, the question that arises is whether SMAM can be used as an approximation of the mean age at first marriage. The computation of SMAM is based on the principle that age at first marriage corresponds to the average number of years spent in the single state by those who eventually marry. This measure is also based on the assumptions that no first marriages take place after age

50 and that there is a consistent fall in the proportion of singles with age. Its main drawback is that it describes the marital experience of a hypothetical cohort. The SMAM referring to a certain date will not be identical with the actual mean age at first marriage (which is a period measure) unless marriage patterns have remained constant over the previous thirty-five years. If mean age at marriage changes over the years, the SMAM will not be an accurate measure of mean age at marriage. However, in the absence of a more readily available measurement, SMAM gives an approximation of the age at first marriage and its use is widespread in historical demography. The bulk of our knowledge about age at marriage in Europe from the nineteenth century until the beginning of the twentieth century is based on the calculation of SMAM.[6] The acceptability of SMAM in the scholar world is underlined by the influential article of John Hajnal "European Marriage Patterns in Perspective," which is based on percentage of singles at selected ages to describe the marriage patterns in question and not on age at first marriage calculated from wedding certificates.[7] Even for the modern period, comparisons of age at first marriage across different countries are made in terms of SMAM.[8]

Apart from the aforementioned three basic variables that describe the marriage pattern, we calculated two indices of the availability of mates so as to explain the sex differentials in permanent celibacy. The first index is the sex ratio at marriageable ages, which shows how many males aged twenty to forty-nine exist for every 100 females aged fifteen to forty-four. This index is an indication of the current trends in the availability of mates. The second index is the sex ratio at the end of marriageable ages (forty-five to fifty-four), and it gives a rough indication of the past trends in the availability of mates. It could be used to explain the percentage of never married by age fifty, since the more numerous sex in the last thirty years should exhibit higher permanent celibacy.

To measure the association between two quantitative variables (e.g., the association between availability of mates and permanent celibacy of the more numerous sex), we employ Pearson's correlation coefficient (Pearson's r). This coefficient estimates the direction and strength of the relationship between two continuous variables. It ranges from -1 to $+1$. Negative values show a negative relationship between the two variables, meaning that high values in one variable are correlated with low values in the other variable and vice versa. Positive values of Pearson's r show that high values in one variable are correlated with high values in the other variable and vice versa. A correlation between two variables does not necessarily imply that one variable causes the other, although a strong correlation (a Pearson's r close to -1 or to $+1$) is an indication that a causal relationship exists.[9]

Results

Age at First Marriage

In Imperial Germany in the beginning of the twentieth century, bachelors were getting married at a mean age of 26.7 years and females at 24.3 years. These figures are consistent with the "West" model of marriage where women entered matrimony at a late age, later, that is, than in other areas of Europe and, as a matter of fact, in other continents as well.[10] There was, however, spatial variation in the mean age at first marriage and the geographical pattern of this variation was different for males and females.

Posen and Saxony, as shown in Figure 1, presented the lowest age at first marriage for males (twenty-five to twenty-six). At the other end of the scale lied the states of southern Germany: Bavaria, Baden, Wurttemberg, and Alsace-Lorraine where men married two to three years older (twenty-seven to twenty-eight). Within the territory of Wurttemberg there was the state of Hohenzollern, where the men had the highest age at first marriage in the whole empire (twenty-nine years of age). In the remaining areas (western and northern Germany, Prussia, and Silesia), men married

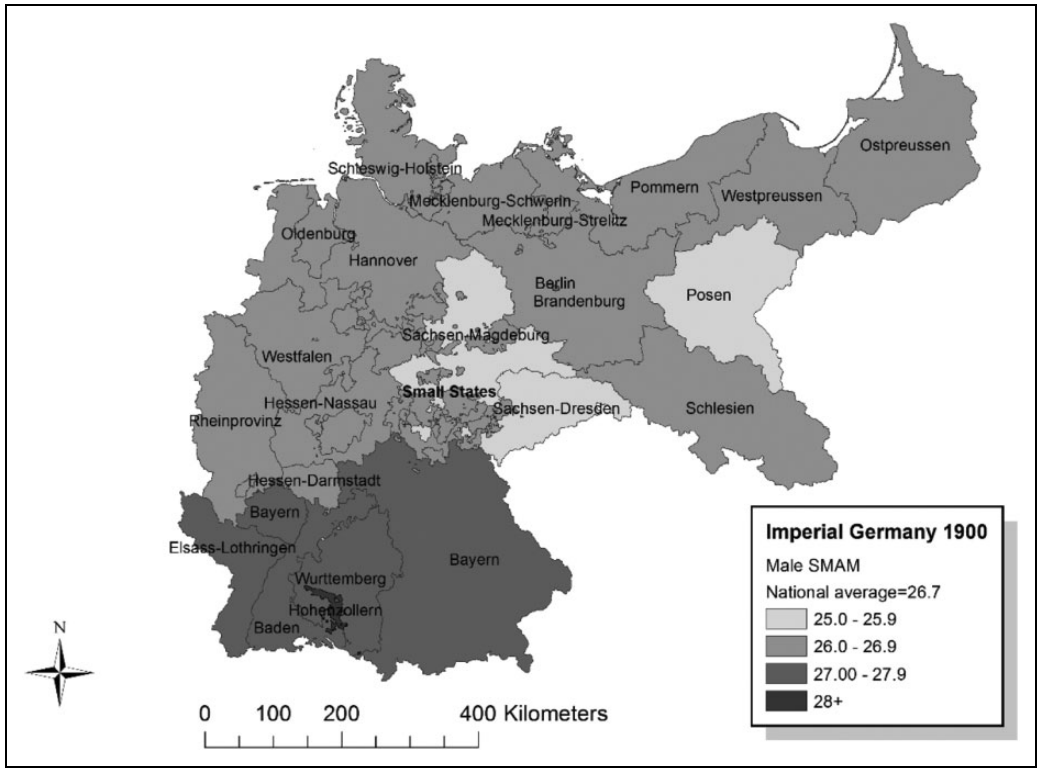

Figure 1. Singulate mean age at marriage for males. Germany 1900.

for the first time at an average age of twenty-six to twenty-seven years, which is consistent with the "West" marriage pattern described by Hajnal and Laslett.

The geographical pattern of the female SMAM differs from that of males (Figure 2). Southern Germany (Bavaria, Wurttemberg, and Hohenzollern) presents the greatest mean age at first marriage for females as well for males, but equally high age at first marriage for females is also to be found in East Prussia (which was not the case for males). The areas with the lowest female SMAM (23–24 years of age) are scattered among central Germany (Upper Saxony), northern Germany (Oldenburg, Schleswig-Holstein), and western Germany (Westphalia and Alsace-Lorraine). It is noteworthy that even in these areas, the mean female age at first marriage was high enough to be consistent with the "West" marriage pattern. In the entire German Empire, the female SMAM was 24.3 years of age. At the same time in Eastern Europe, females were getting married at a noticeable younger age. In Romania, Bulgaria, Bosnia, and Serbia, the female SMAM was oscillating between 20.1 and 20.8 years of age according to censuses that took place around 1900.[11]

Age Difference between Spouses

One of the features of the "European" or "West" marriage pattern was the small age difference between spouses. In England and Wales, for example, the mean spousal age difference in first marriages in the beginning of the twentieth century was a little more than 1.5 years.[12] On the other hand, during the same period (around 1900) in parts of Mediterranean Europe, where women married at younger ages, the age difference between spouses was well above 5 years.[13] In Imperial Germany,

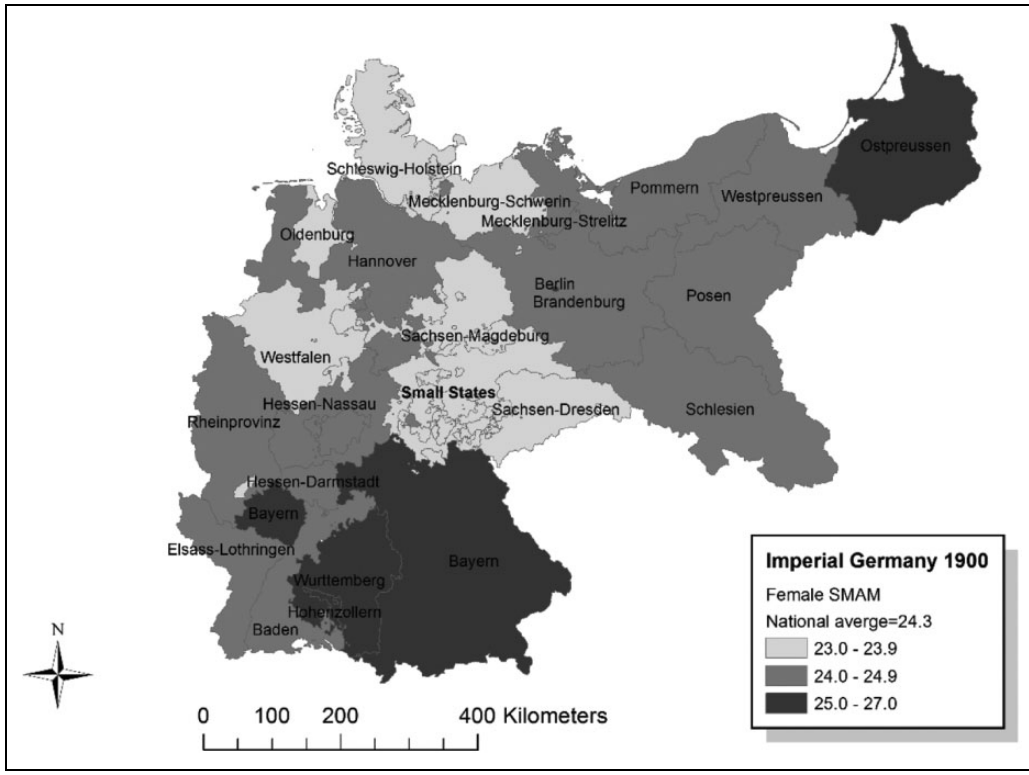

Figure 2. Singulate mean age at marriage for females. Germany 1900.

a bachelor would be, on average, 2.3 years older than the spinster he would marry, an age difference consistent with what Laslett describes as "West" model (Figure 3).

The areas with the greatest age gap between spouses were Alsace-Lorraine and Westphalia, where husbands were on average more than 3 years (3.5 years in Alsace-Lorraine and 3.2 years in Westphalia) older than their wives. In the rest of the German states, the age difference between spouses was less than 3 years, thus reconfirming the "West" marriage pattern. One should note that the age difference presented here is the mean age difference calculated as male SMAM minus female SMAM. Around this mean, there might have been significant deviations, and there would certainly have been cases where spouses were older than their husbands. Yet our data do not allow us to trace these deviations from the mean.

Permanent Celibacy

High rates of permanent celibacy have characterized Western Europe "for at least two centuries up to 1940," according to Hajnal.[14] Imperial Germany was no exception to this pattern, although the percentage of never married males in certain parts of Germany was quite low by Western standards.

As can be seen in Figure 4, there was a differentiation in the extent of permanent celibacy for males between the eastern part of the German Empire and the rest of it. In Prussia, Posen, Silesia, and Saxony, 5 percent to 7 percent of all males were never married by age fifty. These percentages are rather small by the standards of the "West" marriage pattern. On the other hand, in Alsace-Lorraine, Bavaria, and Baden in southern Germany and in Oldenburg and Schleswig-Holstein in northern Germany, the percentages of never married males were above 10 percent.

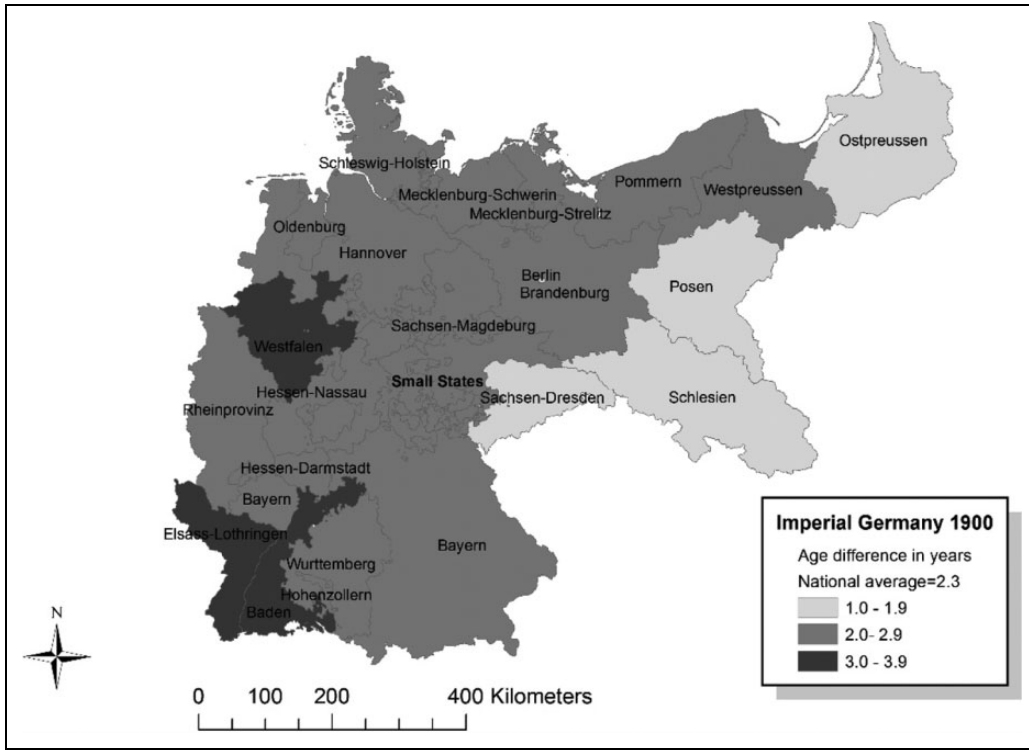

Figure 3. Age difference between spouses (male singulate mean age at marriage [SMAM] minus female SMAM). Germany 1900.

The East–West dichotomy, as far as permanent celibacy is concerned, does not hold in the case of females as it did for males. The western states of Alsace-Lorraine and Rhineland and the small state of Hohenzollern exhibited the highest percentages of never married women, followed by the southwestern states of Bavaria, Baden, Hessen, and Wurttemberg. However, in East Prussia and Silesia, the percentage of never married females was above 10 percent, meaning that female permanent celibacy in these regions was at the same level with that of western and southwestern Germany. A keen observer will notice that many states with above 10 percent never married females were predominantly Catholic (see also Figure 5). Yet, it remains to be investigated whether this is a distinct religious pattern or another factor is the cause behind high level of female permanent celibacy.

It is noteworthy, however, that in most German states and in the German Empire as a whole, the extent of permanent celibacy was greater for women than for men. In all, 10.3 percent of all women in the German Empire in 1900 were never married, yet only 8.3 percent of men remained permanently unmarried. This peculiarity is not a feature of the ''West'' marriage pattern as described by Laslett.

However, the greater extent of permanent celibacy for women is not a peculiarity of the German Empire. It was a feature that characterized Great Britain (not Ireland), Sweden, Norway, Finland, and Denmark as well around 1900.[15] Moreover, there were areas in Central and Eastern Europe where more women than men remained unmarried. Such were the Russian provinces that later on (after the First World War) constituted the Baltic states of Estonia, Latvia, and Lithuania. Furthermore, in Austro-Hungarian provinces that later on constituted Czechoslovakia, permanent celibacy was also greater for females than for males; the same goes for the provinces of Russia, Austria, and Germany that after the First World War made Poland (among them were the states of West Prussia

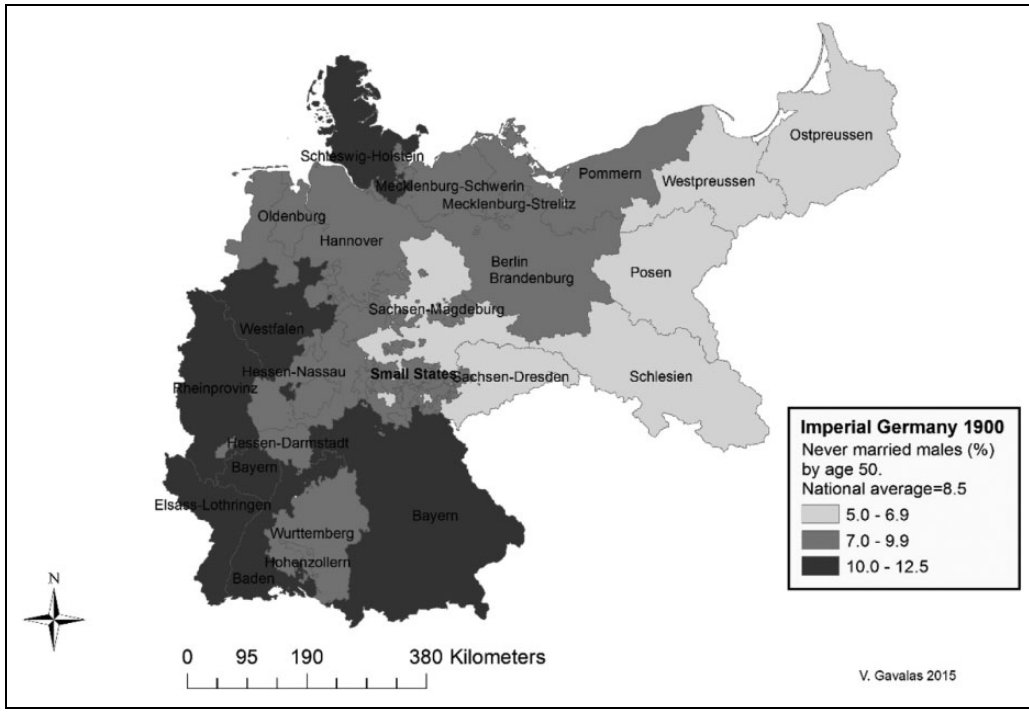

Figure 4. Percentage of males never married by age fifty. Germany 1900.

and Posen).[16] It may be the case that the greater extent of permanent celibacy for females than for males was a feature of Western and Central Europe around 1900, although it is not mentioned in the typology of Laslett. There is also the case of Belgium, where proportionally more never married women than men were to be found in three industrial and urban cities, namely, Gent, Antwerp, and Aalst. In these cities, one out of four women were never married by the age of forty-five, while the percentage of never married males at the same age was 18.6 percent in the mid-nineteenth century. The percentage of never married women decreased by the end of the nineteenth century but still, in two out of three of these cities, the extent of permanent celibacy was greater for women than for men.[17]

In Search for Explanations

The main demographic factor that could differ in such a way as to alter the marriage behavior of the population among the different German states is the availability of mates. Availability of mates is determined primarily by two factors: the sex ratio of persons at marriageable age and the method of mate selection (arranged marriages or free choice). Great imbalances in sex ratios would lead to delayed marriages and to higher percentages of never-married people among the more numerous sex. On the other hand, arranged marriages usually (though not always) lead to an early and universal matrimony.[18] In this study, the availability of mates is measured by two indices. Firstly, the ratio of males aged twenty to forty-nine to females five years younger is used to give an indication of the availability of mates in the census year. This measure could explain the percentages never married at age fifty, since the more numerous sex should exhibit higher permanent celibacy. All other things being equal (i.e., the desirability of marriage and the feasibility of marriage owing to economic and social norms), permanent celibacy is connected with availability of mates.[19] The second measure is

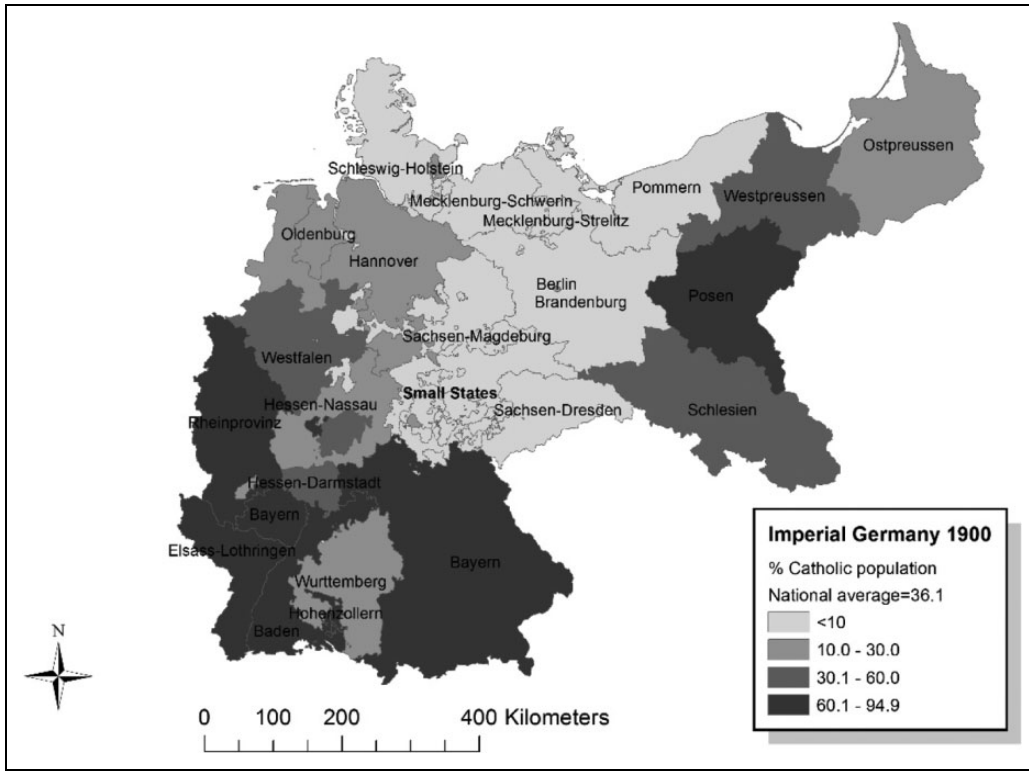

Figure 5. Catholics as a percentage of total population. Imperial Germany 1900.

the sex ratio at the end of marriageable ages (forty-five to fifty-four). This sex ratio is a crude indication of the past trends in the availability of mates. It does not show whether there are currently available mates for either sex, but it indicates whether there were enough mates for either sex in the last thirty years.

Figure 6 depicts the sex ratio at marriageable ages in 1900. This ratio was very low, which means fewer men than women, in the eastern part of the empire and more specifically in East and West Prussia, Posen, and Silesia. Moreover, a dearth of males is observed in Wurttemberg, Hohenzollern (southern Germany), and in Hessen-Nassau. A comparison of Figures 6 and 7 reveals that the areas with a dearth of males in Figure 6 are the same (more or less) areas with the highest percentages of never-married women in Figure 7. Nevertheless, this negative relationship between availability of males in marriageable ages and female permanent celibacy is not depicted by Pearson's r (Table 2) because Alsace-Lorraine constituted an exception, which falsifies the negative relationship. Alsace-Loraine had the highest percentage of never-married women (16.7 percent) and at the same time, the most masculine sex ratio at marriageable ages (about 106 men to every 100 women).

The sex ratio at the end of marriageable ages (forty-five to fifty-four) is depicted in Figure 8. A lack of males around age fifty is observed in the eastern part of the empire (East and West Prussia, Posen, and Silesia) and also in Wurttemberg, Hohenzollern, Hessen-Nassau, and Alsace-Loraine (western Germany). As it is obvious from the correlations in Table 2, a lack of men at the end of the marriageable ages (forty-five to fifty-four) is a stronger determinant of the female permanent celibacy (Pearson's $r = -.31$) in our data. Nevertheless, the probability that this correlation coefficient ($-.31$) came up by chance is quite big (.142), although areas with a dearth of males at age fifty (Figure 8) match more or less the areas with the highest percentages of never-married women

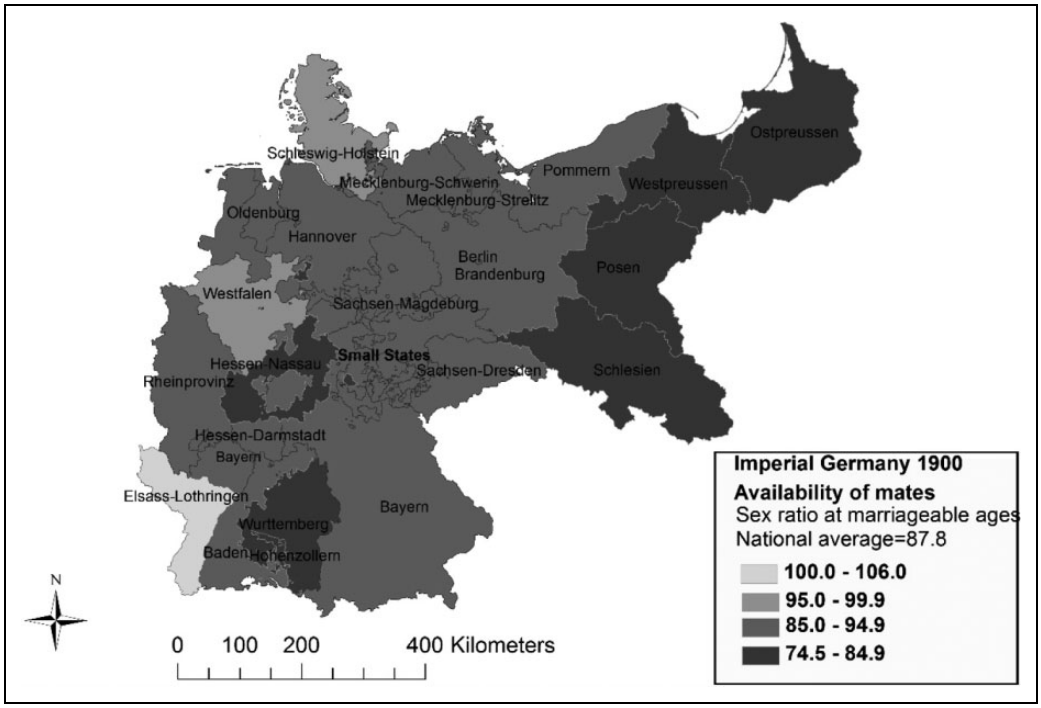

Figure 6. Sex ratio at marriageable ages (males 20–49 per 100 females 15–44). Germany 1900.

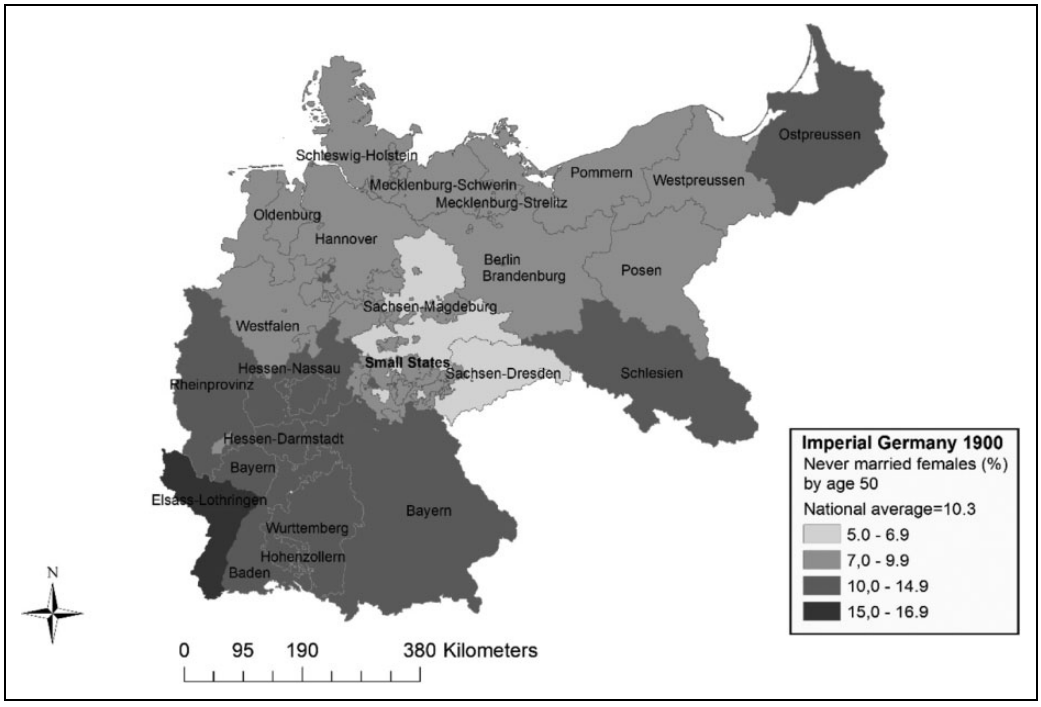

Figure 7. Percentage of females never married by age fifty. Germany 1900.

Table 2. Percentage of Females Never Married by Age Fifty (column A) and Sex Ratio at Marriageable Ages (column B) and at the End of Marriageable Ages (column C). Germany 1900.

State	(A) Percentage of never-married females by age 50	(B) Males aged 20–49 per 100 females aged 15–44	(C) Males aged 45–54 per 100 females aged 45–54
Saxony (Magdeburg)	6.4	85.3	93.3
Saxony (Dresden)	6.7	86.5	90.5
Brandenburg	8.1	89.1	92
Hannover	8.2	90.6	98.3
Posen	8.3	74.6	83.9
Mecklenburg-Strelitz	8.4	90.4	92.4
Westphalia	8.5	98.3	104.7
Small states	8.5	87.0	92.7
Schleswig-Holstein	8.7	95.4	99.7
West Prussia	8.8	84.4	90.9
Mecklenburg-Schwerin	9.0	87.7	93.4
Pomerania	9.2	85	91.2
Oldenburg	9.3	87.2	96.3
Hessen	10.0	90.8	92.6
Silesia	10.6	80.9	82.5
East Prussia	10.6	82.5	84.6
Hessen-Nassau	11.2	83	89.4
Berlin	11.7	88.4	84.6
Wurttemberg	12.6	83.8	87.1
Rhineland	12.8	91.7	99.1
Bavaria	12.9	87.2	92.5
Baden	13.4	89.2	92.1
Hohenzollern	14.6	80.4	89.4
Alsace-Lorraine	16.7	105.7	86.2

Source: Elaboration of census returns. German census 1900.
Pearson's r (A*B) = .23, p value = .281. Pearson's r (A*C) = −.31, p value = .142.

(Figure 7). The fact that the correlation between lack of men and female permanent celibacy is neither strong nor statistically significant implies that other factors were contributing as well, determining the percentages of never-married women.

One of these factors could have been differential mortality by sex. Admittedly, females had lower mortality in Germany even in the nineteenth century. Yet was female mortality lower to such an extent that the sex ratio of the age group fifteen to twenty-four (the prime marriageable age) would look significantly different thirty years later, when the cohort aged forty-five to fifty-four? To answer this question, we resorted to two life tables (one for each sex), available online in the Human Life-table database[20] (see Appendix). From these life tables follows that out of 100 males aged fifteen years in 1871, 68 would have survived to age fifty, while the relevant figure for females would have been seventy-one. This gives a sex ratio of 96 males per 100 females at age fifty taking into account that in Germany as a whole there were 100.5 males per 100 females at ages fifteen to nineteen. From this cursory analysis follows that sex differential mortality explains only partially the lack of males at age fifty. In the German Reich in 1900, there were 91.5 males per 100 females, meaning that other factor(s) were responsible as well, for the dearth of males.

Most probably, the other single factor was sex differential migration. During the 1870s and the 1880s, emigration from Germany to other countries (mainly the United States) was averaging an

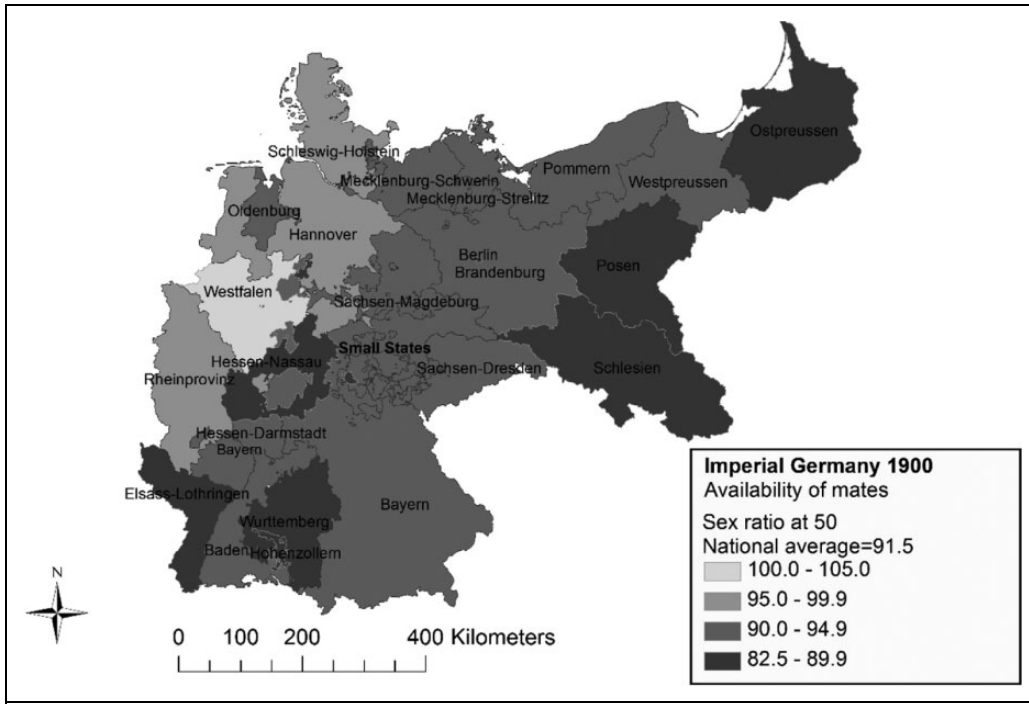

Figure 8. Sex ratio at age fifty (males per 100 females). Germany 1900.

annual net migration of −2.8 per 1000 population.[21] In total, the German Empire lost 2.46 million people to emigration between 1871 and 1895.[22] The majority of those emigrants were young males who left Germany searching for a better life overseas and in other European countries.[23]

The spatial variation of the household structure in nineteenth century Germany is explained in the relevant bibliography[24] within the frame of three dichotomies, which are, in some extent, overlapping each other. These dichotomies are

East–West Germany, with the river Elbe constituting a physical boundary between the two.

Populations of Slavic and non-Slavic origin. A significant part of the population east of the Elbe was of Slavic origin and their mother tongue was not German.[25]

Urban–rural areas. More rural areas, where big estates were the norm, lied east of the river Elbe.

This tripartite dichotomy serves to interpret the household structure. In the areas east of the river Elbe, there were more joint households, that is, households where two or more married sons and their families coresided with their parents. This is explained to some extent by the Slavic tradition of agricultural communality and by the rural character of the areas laying east of the river Elbe.[26] Communality in Slavic populations living in rural areas had its roots in a household structure called *zadruga* and was dominant in the Slavic populations of the Balkans. Residence in the *zadruga* was patrilocal, that is, married couples moved to the groom's paternal household upon marriage. The practice of patrilocality created extended households of two or more nuclear families, which, in the framework of *zadruga,* they shared land, livestock, and tools. This system of domestic organization favored early and universal marriage for both sexes for the following reasons: the decisions in the *zadruga* were taken by the married males. Therefore, a marriage would upgrade the status of young men.

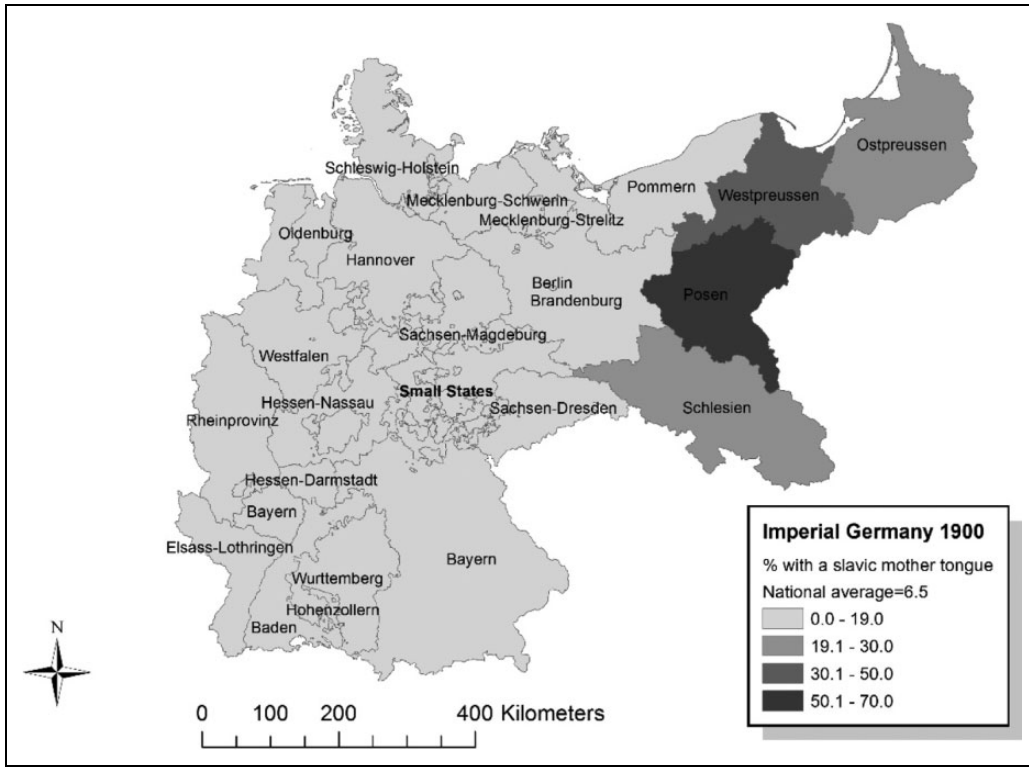

Figure 9. Population (percentage of total) with a Slavic language as mother tongue. Imperial Germany 1900.

Moreover, due to agricultural communality and patrilocality, young men did not have to accumulate personal property to establish their own household. An early marriage was in the best interest of women as well, because those who remained single were treated as servants by their fathers and married brothers.[27]

It is not clear, however, to what extent the south Slavic tradition of communality can serve as an interpretative framework for the marriage patterns found in Imperial Germany in 1900. In a simplistic generalization, one could claim that populations of Slavic origin, which lived east of the Elbe (see Figure 9 for the geographical areas of Slavic-speaking population) and were less urbanized than the rest of Germans, married younger, and with greater propensity (the percentages of never married were lower) than populations that lived west of the Elbe. Such a claim, however, bears some validity for males only but not for females. In certain areas east of the Elbe (East Prussia, Silesia), permanent celibacy was greater for women (over 10 percent of women were never married by age 50) and the female mean age at first marriage was higher than 24.3, which was the average age for the whole German Empire. Migration from rural to urban areas could partly explain this unexpected pattern, as people from Prussia (mainly East and West Prussia, Possen, and Silesia) moved to urban and industrial centers such Berlin and Ruhr. This internal migration involved more males than females.[28]

Another reason for the inconsistency between the expected and the observed female marriage pattern east of the river Elbe maybe the lack of males at marriageable ages due to the wars that occurred between Prussia and its enemies a few decades before the census of 1900. These wars took place between 1864 and 1871 and resulted in the unification of various states under the Prussian rule and the creation of the German Empire.[29] A war with Denmark in 1864 was fought for the control of Schleswig-Holstein. Another war in 1866 between the German Confederation and the Kingdom

of Prussia resulted in Prussian dominance over the German states. These two wars combined had casualties that amounted to thousands of soldiers. Yet the most significant and devastating in this series of wars was the Franco-Prussian war that took place in 1870–1871. Prussia and its allies, which were the southern German states of Baden, Württemberg, Bavaria, and Hessen-Darmstadt, juxtapose an army of 1.2 million soldiers against the French army of 0.9 million soldiers. The victory of the Prussian and German forces resulted in the unification of the German states under the German Empire and the annexation of most of Alsace and some parts of Lorrain, which became the state of Alsace-Lorraine (Reichsland Elsass-Lothringen). Yet the casualties for Prussia and its allies were over 116,000 soldiers, dead or wounded, thus skewing the sex ratio at certain ages for years to come.[30]

Saxony is also a case that does not fit in the dichotomies laid out earlier on. In the administrative division of 1900, there are two Saxonies, classified as ''Bundesstaaten'' by the census: the northern Saxony, the capital of which was Magdeburg and was part of Prussia since 1815, and the southern Saxony, the capital of which is Dresden. Both of them are located west of the river Elbe, the majority of their population were Protestants with no Slavic origins and a sizable part of Saxonians resided in urban centers in 1900.[31] Nevertheless, the marriage pattern in Saxony deviates from the typical ''West'' model. The percentages of never-married males and females were the lowest within the German Empire in 1900 (5 percent to 7 percent), mean age at marriage was also the lowest for men (25.6) and the second lowest for women (23.6 with the lowest being 23.4 in Westphalia). Saxony's marriage pattern does not fit in the ''West'' model mainly because the percentages of never married were lower than expected for the West Europe.

Discussion and Conclusions

Geographical variation in marriage patterns is important because it implies different cultures and in some cases different social, economic, or even demographic structures. In general terms, the marriage pattern in the German Empire does not deviate significantly from the ''West'' model, as described by Laslett (or the ''European marriage pattern'' that has been patented by Hajnal). The average German bachelor would endeavor into matrimony at about 27 years of age and his spouse would have been approximately 2.5 years younger than him. It is worth noting that in Germany as a whole there were more never-married women than never-married men. More than 10 percent of females were still spinsters at their fifties, while only 8.5 percent of males were still bachelors at that age. This peculiarity is observed the same period (end of the nineteenth century to the beginning of the twentieth century) in many West-European countries, including Great Britain and the Scandinavian Countries, and also in East and Central Europe, mainly in the Baltic provinces of Russia and in areas that later on became Poland and Czechoslovakia.

Even without this peculiarity, however, Germany in 1900 was not characterized by a uniform marriage pattern. There were certain areas of the empire that exhibited lower than the national average age at first marriage either for males or for females (Posen and Saxony for males, Westphalia, Saxony, Schleswig-Holstein, and Oldenburg for females). And there were areas, mainly in the southwestern part of Germany (Bavaria, Wurttemberg) where males and females got married at a higher mean age than Germany's national average. This differentiation cannot be generalized in the East–West dichotomy. This is because there is the case of East Prussia, where, contrary to what would be expected, mean female age at first marriage was high (25.1 vs. 24.3, which was the national average) and the extent of permanent celibacy for females was great (10.6 percent of females were never married by age fifty). This female marriage pattern in East Prussia might be explained by a dearth of men at marriageable ages: there were 84.6 males per 100 females at fifty years of age, while in Germany as a whole this sex ratio was 92/100. The Franco-Prussian war that took place in 1870–1871, where many young males fell as soldiers, may be responsible for the lack of males in Prussia.

The analysis of this research article establishes that in the 1900 Germany, under the general marriage pattern, which is characterized as "West," there was a noteworthy diversity in marriage patterns at the regional level. Previous studies[32] concerning Imperial Germany have also found a considerable diversity as far as household structures are concerned, and they have pointed out that patterns of household formation were shaped by cultural and macroeconomic factors alike. The economic structure of a society is a determinant of the household structures and the marriage behavior, and this is confirmed by the fact that in areas where a greater part of the population was working in agriculture, there were proportionally more joint family households.[33] Yet a great part of the diversity in marriage patterns and household structures is due to the Slavic tradition of communality. The religion might also be a determinant of family formation. In the Prussian states that Catholicism was dominant the percentage of never-married men (but not that of women) was lower than in the states where Protestantism was the mode. However, the same cannot be said for the German states that Catholicism was dominant. In the states of southern Germany (Bayern, Baden, Rhineland, and Alsace-Lorraine) although the majority of the population was Catholic, permanent celibacy was in high levels for males (over 10 percent of males were never married by age fifty). Last, but not least, purely demographic factors such as the availability of mates play a crucial role in the marriage behavior of people. To fully understand the geography of marriage patterns and household structures, one should examine the interaction of all these economic, cultural, and demographic determinants.

Appendix

Sex Differential Mortality in Imperial Germany

The sole purpose of the following table is to investigate to what extent sex differential mortality has altered the sex ratio from age fifteen to fifty in the period under consideration. According to the German census of 1900, at the beginning of the marriageable ages (fifteen to nineteen), there were 100.5 males per 100 females. Yet at the end of the marriageable ages (forty-five to fifty-four), there were only 91.5 males per 100 females. Table A1 will help us discern to what extent the dearth of males in the end of the marriageable ages was due to sex differential mortality (see relevant section in the main text).

Table A1. Selected Values from German Life Tables (Year of Reference 1871/1881) Showing Sex Differential Mortality.

$Age_{(x)}$	$l_{(x)}$	$e_{(x)}$	Ratio $l_{(50)}/l_{(15)}$
Males			
0	100,000	35.6	
15	60,892	42.4	
50	41,228	18.0	0.68
Females			
0	100,000	38.5	
15	63,878	44.2	
50	45,245	19.2	0.71

Source: Human Life-table Database, accessed May 8, 2016, http://www.lifetable.de/data/MPIDR/DEU00001871881CU1.txt.

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