PAA: Topic - Marriage, Family, Households and Unions; session on 'Family and Household in Historical and Comparative Perspective' organized by Catherine A. Fitch, University of Minnesota

# Spatial Variation in Household Structure in 19th and early 20th century Germany

#### Short abstract

In the center of continental Europe, ranging from East to West and North to South, Germany includes many of the cultural, economic, and religious variations found across Europe. In this study, we take advantage of the great internal heterogeneity of 19th century Germany to gain a better understanding of the patterns and causes of household structure variation. Using aggregate data at scales ranging from the province to the Kreis, we document the contours, gradients, and variability of family structure using measures of household complexity and entry into marriage. The rich statistical data gathered by the Prussians and by the German Reich enable us to study not only geographic variability -- e.g., the existence of East-West or North-South gradients but also to examine the hypothesized roles of economic development, agricultural systems, inheritance practices, religion, ethnic background, and urbanicity. We plan to focus on four interrelated questions: (1) Are family structure and marriage patterns consistent with the hypothesized East-West distinction put forth by Hajnal? (2) Is the pattern of land-ownership and agricultural organization, notably the east-Elbian divide suggested by Weber, an important organizing principle of household and family structure? (3) Are patterns consistent with the agricultural development hypothesis most recently advocated by Ruggles? (4) Are patterns consistent with inheritance patterns as advocated by Berkner and others? Our analysis will use fine level data gathered in Prussian Kreise, as well as larger aggregations such as Regierungsbezirk to Province-level data. Demographic measures range from mean age of marriage, average family size, to number of coresident kin. A wide variety of socio-economic measures are available. Our preliminary analysis suggest to us no clear role of static distinctions such as the East-West gradient, religion, and ethnicity. Rather, if there is structure behind the variation it would appear to lie in a more complex set of economic and political arrangemetns. We plan to study how crosssectional variation changes over time, allowing us the potential to assess to some degree the persistence of family forms.

## **General abstract**

In the center of continental Europe, ranging from East to West and North to South, Germany includes many of the cultural, economic, and religious variations found across Europe. In spite of that, and despite the wealth of available material, in all debates over spatial organization of European family forms (Hajnal, 1965; Macfarlane, 1980; Hajnal, 1982; Laslett, 1983), household structure and household formation rules in historical Germany had either been neglected, or given only a most secondary importance during subsequent decades (Bähr, 1997; Marschalck, 1984; Peuckert, 2008; Janas, 2005; Rosenbaum, 1996; Weber-Kellermann, 1982; Lee, 1981). Household characteristics out there have been provisionally portrayed as forming an intermediate category and being somewhere between the extremes of the 'western' and 'eastern' types (Laslett 1983: 528-530; Robisheaux, 1998, 129-130). Equally circumstantial was the evidence provided by German ethnologists and demographers of the 1920-30s who asserted the 'typical' German type of the family to have always been the paternalistically-administrated (usually) two-generational small family with coresiding servants (Riehl, 1855; Sering, 1934; Ipsen, 1933; Conze, 1940; also Schlumbohm 1998; Brunner, 1956; Mackenroth

1953, 360, 362). Consequently, they had maintained that there was a fundamental contrast between German and Slavic populations in terms of family composition. This familistic border was supposed to still exist around the turn of the 19<sup>th</sup> century and to determine divergent demographic conduit of Germanic and Slavic populations during demographic changes associated with the first demographic transition (Knodel, 1974, p. 144-147; Haines 1971, 65-66). Few existing local studies suggest, however, such a homogenous picture of family pattern in Germany may have to be rejected (Berkner, 1976; Schlumbohm, 1994; also Pfister, 2008).

In this study, we use the rich statistical data gathered by the Prussians and by the German Reich to fill the existing gap in comparative demographic studies of historical family structures in Europe. More importantly, by focusing on  $19^{th}$  century Germany, we take advantage of its great internal heterogeneity to gain a better understanding of the patterns and causes of household structure variation. Using aggregate data at scales ranging from the province to the *Kreis* (or its equivalents) we document the contours, gradients, and variability of family structure using measures of household complexity and entry into marriage. The rich data available from the Prussian and German statistics enable us to study not only geograpahic variability -- e.g., the existence of East-West or North-South gradients - but also to examine the hypothesized roles of economic development, agricultural systems, inheritance practices, religion, ethnic background, and urbanicity.

We plan to focus on four interrelated questions: (1) Are family structure and nuptiality patterns consistent with the hypothesized East-West distinction put forth by Hajnal and others? (Hajnal, 1965, 1982; also Knodel, 1974, p. 144-147; Haines 1971, 65-66); (2) Is the pattern of land-ownership and agricultural organization, notably the Ostelbische socioeconomic divide suggested by G.F. Knapp and M. Weber (Knapp, 1887; Weber, 1892; also Brenner, 1976, 40-46), an important organizing principle of household and family structure as some scholars believe (Pfister, 2008)? (3) Are those patterns consistent with the 'agricultural development hypothesis' most recently advocated by Ruggles? (Ruggles, 2009); (4) Are patterns consistent with spatial distribution of inheritance practices and settlement patterns as advocated by Berkner (Berkner, 1976; see also Sering, 1897; Robisheaux, 1998; Pfeifer, 1956)?

Our analysis will use fine level data gathered in Prussian Kreise, as well as larger aggregations such as Regierungsbezirk to Province-level data. Demographic measures range from mean age of marriage (SMAM), average family size, to adults and marital units per household, and number of coresident kin (see Burch 1967, 1970, 1980; Burch et.al.,1987; Parish & Schwartz, 1972; Dandekar & Unde, 1967; Wall, 1991). A wide variety of socio-economic measures are available, notably the share of population working in agriculture.

Our preliminary analysis suggest to us no clear role of static distinctions such as the East-West gradient, religion, and ethnicity ). It turned out that neither nuptiality indices (maps 5 and 6), nor measures of household complexity as calculated for different points

in time between 1875 and 1910 (maps 1-4) suggest the Slav/non-Slav differentials have represented a crucial demographic fault line within the region (see map 7). Neither was the great divide of agrarian regimes along the Elbe river (map 8) a good predictor of household and marriage patterns at the turn of 19<sup>th</sup> century. Our preliminary analysis pertains to the significance of patterns observed in both western- and eastern peripheral regions within Prussia, and then Germany. Those regions seem to have been characterized by higher mean household size, often higher nuptiality and greater propensity towards coresidence with kin. If there is structure behind the observed pattern it would appear to lie in a more complex set of economic and political arrangements which can be in accordance with our third and fourth questions-hypothesis.

Methodologically speaking, we will follow family demography literature about most efficient ways in using routine aggregate census data on number of households and on the population classified by age, sex, and marital status to investigate differences in household composition (Burch 1967, 1970, 1980; Burch et.al., 1987; Parish & Schwartz, 1972; Dandekar & Unde, 1967). We will proceed in following steps:

- Using all available measures (adults and marital units per household; mean household size; singulate mean age at marriage; percentage never married by age groups; number of coresident kin; number of solitary households) we will map cross-sectional variation in residential patterns across Germany at different levels of aggregation. We will start with the provincial level. This will be followed by including smaller territorial units of Prussia and other regions (Bayern in particular; see Rothenbacher, 1997) into analysis.
- Various measures of central tendency or dispersion will be employed to reveal intra-regional variation at different points in time, and at different levels of aggregation. Analysis of variance will be used to measure the relationship between intra- and inter-regional differences in household structure and nuptiality.
- □ In the regression model various household and marriage variables will be regressed on 'share Slavic speaking', 'share of estates', 'share of population working in agriculture', and type of inheritance variables to reveal, respectively, the effects of ethnicity, type of the agrarian regime, social structure and modes of property transmission within family.
- Cross-sectional variation will be studied over time, allowing us the potential to assess to some degree the persistence of family forms. The data for all Prussian and German regions and big cities at several different points in time will be mapped using GIS techniques. Maps with spatial patterns at different points in time will be compared using simple correlation matrix. A local Moran's I will be run to help us check if high and low values of the variables sre clustering in space over time.

Although the richness of this data we intend to use is far smaller comparing to individual-level micro-census information now widely used in international comparative household and family studies (Ruggles, 2005), it has a big advantage as it allows the

systematic analysis of the basic features of residential units and marriage patterns in all German lands over a long period of time between mid 19<sup>th</sup> and early 20<sup>th</sup> century.

We believe the proposed research will have manifold scientific merits. Systematic analysis of data on residential units and across time is worthwhile, despite its inherent inability to tell us anything about broader, non-residential family or kinship structures (Burch et.al., 1987, 20). Revealing regional distribution of marriage and household patterns in Germany is particularly interesting, since it is this part of Europe that now remains a missing link in existing spatial models of family, after historical Iberian, French and even Eastern European patterns being recently comprehensively revealed (Le Bras & Todd, 1981; Rowland, 2002; Reher, 1998; Szołtysek, 2008a, 2008b). It is only through a careful spatial reconstruction of household composition within Germany that European geography of family forms can be fully accomplished. Cross-sectional, interregional comparison of household structure in Germany at different levels of aggregation and at different points in time forms excellent background against which other spatially differentiated, but more detailed studies of family composition in the nineteenth-century German Empire could be carried out in the future. The latter can be based either upon other local German censuses (Mecklemburg 1819, 1867; Schlezwik-Holstein, 1803) available to us, or on the relatively abundant collection of micro-census data for particular places, parishes or locations 1803-1867 recently discovered by MPI (Gehrmann, 2009).

### **References**:

Bähr, J. (1997). Bevölkerungsgeographie. Stuttgart: Ulmer 1997. 3rd edition, (UTB 1249)

Berkner, L. (1976). 'Inheritance, Land Tenure and Peasant Family Structure: A German Regional Comparison', in J. Goody, J. Thirsk and EP Thompson, eds., *Family and Inheritance in Rural Western Europe, 1200-1700.* Cambridge: University Press.

Brenner, R. (1976). "Agrarian Class Structure and Economic Development in Pre-. Industrial Europe", *Past and Present*, no. 70 (Feb. 1976), pp. 30-75.

Brunner, O. (1956). «Das "ganze Haus" und die alteurop. "Ökonomik"», in Neue Wege der Verfassungs- und Sozialgesch., hg. von O. Brunner, 1968, 103-127.

Burch, TK (1967). "The size and structure of families: A comparative analysis of

census data," American Sociological Review 32 (3): 347-363.

Burch, TK (1970). "Some Demographic Determinants of Average Household Size: An Analytic Approach". Demography 7:61-70.

Burch, TK (1980). "The index of overall headship: a simple measure of household complexity standardized for age and sex". Demography, vol. 17(1), 93-107.

Burch, TK et.al. (1987). "Measures of household composition and headship based on aggregate routine census data", in *Family demography: methods and their application*, edited by John Bongaarts, Thomas K. Burch, and Kenneth W. Wachter. New York, New York/Oxford, England, Oxford University Press, 19-39.

Conze, W. (1940). Agrarverfassung und Bevölkerung in Litauen und Weißrußland vol. 1, Hirzel, Leipzig.

Dandekar, K. and D.B. Unde. (1967). "Inter-State and Intra-State Differentials in Household Formation Rates", in Ashish Bose, *Patterns of populastion change in India*, 1951-1961, Bombay.

Gehrmann, R. (2009). "German censuses and vital statistics from the 19th century".

Unpublished report for Max Planck Institute for Demographic Research.

Haines, MR (1971). Economic-demographic interrelations in developing agricultural regions : a case study of *Prussian Upper Silesia*, 1840-1914 (unpublished Ph.D. dissertation, University Microfilms International, Ann Arbor, Michigan, USA, 1971).

Hajnal, J. (1965). "European marriage patterns in perspective". In D. V. Glass & D. E. C. Eversley (Eds.), *Population in history. Essays in historical demography* (pp. 101–143). London: Edward Arnold.

Hajnal, J. (1982). "Two kinds of preindustrial household formation system". Population and Development Review, 8, 449-494.

Gunther, I. (1933). "Bevölkerung", in: C. Petersen et.al. (eds.), Handwörterbuch des Grenz- und Auslanddeutschtums, Breslau.

Janas, C. (2005). Zum Wandel von Familienstrukturen. Ein deutsch-polnischer Vergleich. Verlag : Mainz Knapp, G.F. (1887). Die Bauernbefreiung und der Ursprung der Landarbeiter in den älteren Theilen Preußens Theil 1: Überblick der Entwicklung. Leipzig 1887

Knodel, J.E. 1974. The Decline of Fertility in Germany, 18711939. Princeton: Princeton University Press.

Laslett, P. (1983). "Family and household as work group and kin group: areas of traditional Europe compared". In R. Wall & J. Robin (Eds.), *Family forms in historic Europe* (pp. 513–563). Cambridge: Cambridge University Press.

Le Bras, H. and Todd, E. (1981). L'invention de la France. Paris, Librairie Generale de France.

Lee, WR (1981). 'The German Family: A Critical Survey of the Current State of Historical Research, in RJ Evans and WR Lee (eds), *The German Family*, London.

Macfarlane, A. (1981); 'Demographic Structures and Cultural Regions in Europe', Cambridge Anthropology, Vol. 6 nos. 1 & 2 (1981).

Mackenroth, G. (1953). Bevölkerungslehre. Theorie, Soziologie und Statistik der Bevölkerung, Springer, Berlin.

Marschalck, P. (1984). Bevölkerungsgeschichte Deutschlands im 19. und 20. Jahrhundert (Neue Historische Bibliothek, edition suhrkamp Neue Folge Band 244). Frankfurt am Main 1984.

Parish, William L., Jr., and Moshe Schwartz. (1972) . "Household Complexity in Nineteenth Century France". American Sociological Review 37:154-73.

Peuckert, R. (2008). Familienformen im sozialen Wandel. Vs Verlag 7. edition 2008.

Pfeifer, G. (1956). "The Quality of Peasant Living in. Central Eiirope," in. TV. L. Thomas, Jr. (Ed.), Man's. Role in. Changing the Face of the Earth. (Chicago), 240-277.

Pfister, U. (2008). Haushalts- und Familienformen in der bäuerlichen Gesellschaft. Source: http://www.wiwi.uni-muenster.de/wisoge/md/studium/ss08/s02familienformen.pdf

Reher, D. (1998). Perspectives on the Family in Spain. Past and Present. Oxford: Clarendon.

Riehl, W. (1855). Die Familie. 3. Auflage. Cotta Stuttgart.

Robisheaux, T. (1998). "The Peasantries of Western Germany, 1300-1750" in Tom Scott, ed, *The Peasantries fEurope from the Fourteenth to the Eighteenth Centuries* (London: Longman, pp. 111-42. Rosenbaum, H. (1996). Formen der Familie. Untersuchungen zum Zusammenhang von Familienverhältnissen, Sozialstruktur und sozialem Wandel in der deutschen Gesellschaft des 19. Jahrhunderts. Suhrkamp Taschenbuch Wissenschaft 374. 7. edition 1996.

Rothenbacher, F. (1997). Historische Haushalts- und Familienstatistik von Deutschland 1815-1990. Frankfurt [u.a.] : Campus Verlag, 1997

Rowland, R. (2002). "Household and Family in the Iberian Peninsula", Portuguese Journal of Social Science 1 (1), 2002, 62-75.

Ruggles, S. (2005). "The Minnesota Population Center Data Integration Projects: Challenges of harmonizing census microdata across time and place", 2005 Proceedings of the American Statistical Association, Government Statistics Section, Alexandria, VA: American Statistical Association, pp. 1405-1415.

Ruggles, S. (2009). "Reconsidering the Northwest European Family System: Living Arrangements of the Aged in Comparative Historical Perspective". Population and Development Review 35 (2), 249-273.

Schlumbohm, J. (1994). Lebensläufe, Familien, Höfe. Die Bauern und Heuerleute des Osnabrückischen Kirchspiels Belm in proto-industrieller Zeit, 1650–1860. Vandenhoeck & Ruprecht, Göttingen.

Schlumbohm, J. (1998). "Strong myths and flexible practices: House and stem family in Germany". In: A. Fauve-Chamoux and E. Ochiai, Editors, *House and the stem family in Eurasian perspective*, International Research Center for Japanese Studies, Kyoto (1998), pp. 44–58.

Sering, M. (1897). Die Vererbung des ländlichen Grundbesitzes im Königreich Preußen, 14 Bde., 1897 bis 1907.

Szoltysek, M. (2008a). "Three household formation systems in Eastern Europe: another challenge to spatial patterns of the European family", The History of the Family, 13(3), 2008, 223-257.

Szołtysek, M. (2008b). "Rethinking Eastern Europe: household formation patterns in the Polish-Lithuanian Commonwealth and European family systems", Continuity and Change, 23, 2008, 389-427.

Wall, R. (1991). "European family and household systems". In *Historiens et populations. Liber Amicorum Etienne Helin* (pp. 617–636). Louvain-la-Neuve: Academia.

Weber-Kellermann, I. (1982). Die deutsche Familie. Versuch einer Sozialgeschichte. Frankfurt 1982, 7. edition.

## Maps



Source: Reich Statistical Office Base Maps: HGIS Germany



Source: Prussia Statistical Office Base Maps: Hubatsch / Klein; HGIS Germany





Source: Prussia Statistical Office Base Maps: Hubatsch / Klein; HGIS Germany

Fig. 4: Co-resident Relatives per 100 Households (Germany)



ource: Reich Statistical Office Base Maps: HGIS Germany





Source: Knodel & Maynes, 1976 Base Map: HGIS Germany

Fig. 7: Share of Persons with Slavic Mother Tongue (1910) (Prussia)



Source: Prussian Statistical Office Base Maps: Hubatsch / Klein; HGIS Germany



Source: Prussia Statistical Office Base Map: HGIS Germany





Source: Prussian Statistical Office Base Maps: Hubatsch / Klein; HGIS Germany