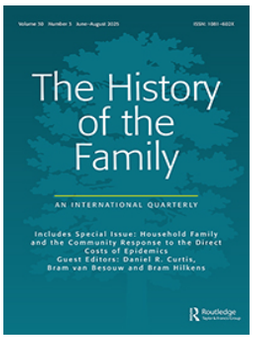

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Mapping the Jewish family in eighteenth-century east-central Europe. Diversity, unity and in-law equality

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ABSTRACT

In the early modern period, east-central Europe became home to the majority of the world's Jewry. Forbidden from working in agriculture, Jews resided predominantly in towns, often holding the position of the urban majority. The study shows that despite a defined economic role and shared cultural background Jews developed diverse family forms in the region. Evidence for this comes from census microdata on Jewish populations in 34 areas across the Polish-Lithuanian Commonwealth, Bohemia and Bukovina from the years 1764 to 1809. By applying clustering methods to basic family parameters, three, spatially coherent regional forms are defined. In the Western region, Bohemia and Gdańsk, Jews tended to marry late and reside in predominantly single-family households. In the Northeastern region, covering the Great Duchy of Lithuania and central Ukraine, Jews married early and lived in complex families. The Central region, covering most of the Polish Crown, was transitional in nature, featuring selected characteristics of the earlier two regions. The regional boundaries largely coincide with the Prussian and Habsburgs' residential policies towards the Jews, leaseholding patterns, as well as with the reach of Yiddish dialects. The study proposes a new concept of in-law equality — the balance between married sons and married daughters co-residing with parents — as a unique feature of Jewish families in Poland–Lithuania, which was maintained regardless of the extent of family nuclearization. The findings align with recent research on peasant families undermining the spatial simplicity of the Hajnalian dualistic division of Europe into two major regions.

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1. Introduction

The spatialization of history is a relatively recent process, fueled by postmodernist disbelief in the master narratives of universal progress, globalization, and the quest for heterotopias, sites of social disruption of routine.[1] The idea has prompted many historians to reconsider geography and approach it not as a politically informed boundary, but rather as a fluid product of culture. Postcolonial critique has helped them to further abandon imperial narratives, historicism, and developmentalism, in favor of nuanced

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and localized framings of the past, as reflected in a growing number of studies in transnational, environmental history, and landscape history (Bavaj, 2022, pp. 7–14). Two major political events contributed to the reimagining of historical space and the 'spatial turn' by western scholars. Firstly, the fall of communism caused many historians to abandon thinking of Europe in terms of east-west blocks. Secondly, Russia's full-scale war against Ukraine led those who continued to view the region through the lens of the 'former Soviet Union' or the 'Russian world' to abandon these analytical categories.[2]

While spatial aspects were ingrained in demography as it emerged from the highly politicized collection of information initiated to consolidate nation-states, recent decades have brought about significant changes. With the development of statistical modeling and computer techniques, demographers can not only account for geographic space and its derivatives, such as temperature, natural resources, terrain relief, but also shift attention from national to subnational populations and even individuals (Alter, 2020, pp. 346–349; Reid & Boomen, 2015, p. 314; Szreter, 1996, pp. 546–556). Spatialization helps avoid ecological fallacy and perceive persons as agents whose activity depends on individual or local characteristics rather than on broad national features (Voss, 2007). With this shift, individual communities can be studied not in place of but as part of entire regions.

Spatialization helped to dismantle the poorly evidenced models of great territorial divisions of Europe that had persisted for decades. In the 1960s, John Hajnal drew a line dividing the world into 'Europe,' dominated by small, nuclear families, and 'non-Europe,' dominated by multigenerational families (Hajnal, 1965; Hanjal, 1983). Some historians considered the simplicity of northwestern European families a demographic precondition for early modern capitalism and the Industrial Revolution (De Moor & Van Zanden, 2010). This particular focus on Western European uniqueness, combined with the missing evidence from behind the Iron Curtain, led to a dismissive attitude toward space in family history. Recently, historical demographers have challenged these grand narratives either through exploring new, vast micro data (Szołtysek, 2015) or through modeling the individual's behavior (Alter, 2020).

Spatialization has not left Jewish Studies unaffected. First, the vision of the Jews as uprooted and of Judaism as transcending all Jewish geographies, which was embodied in the writings of Heinrich Graetz and Simon Dubnov, has been abandoned in favor of a national approach. From the 1970s onwards, instead of neutralizing local differences, historians began to contextualize Jewish history within geopolitical bodies (Rosman, 2009, pp. 17–22). The proper spatial turn, however, occurred more recently, when historiography shifted its focus from the traditional framing of the Jewish past in homeland-diaspora or religious-secular dichotomies to the study of local transcultural entanglements, where borders are understood as zones of contact rather than divisive boundaries. Many researchers have begun to perceive space primarily in a more metaphorical way, as the production and negotiation of Jewish experience and identity (Gromova et al., 2015, p. 14; Lässig & Rürup, 2017, pp. 1–2; Lipphardt et al., 2008, pp. 3–15; Mann, 2012, pp. 6–22). In the case of east-central Europe, such an abstract approach focusing on the mythological origins of Polish Jewry or shtetl space helps to show the entanglement of Polish, Christian, and Jewish experiences (Bar-Itzhak, 2008; Mann, 2012, p. 97), but it also reinforces the notion of large, national spatial units.

Family demography of the Jews, however, has not yet entered the 'turn.' As Shaul Stampfer wrote in his study of the patriarchy in Jewish families: 'It is also important to

recognize that there was no single pattern of the Jewish family. There were sharp class differences in eastern European Jewish society (. . .). There were also differences that were tied to geography, and Jewish populations in different regions diverged from each other in many ways' (Stampfer, 2010, p. 122). These were words of warning rather than an empirical diagnosis. The classic works on Jewish demography and family in east-central Europe promoted unity over diversity. Jacob Katz's essay on the Ashkenazi family seems to have been written beyond time and space, without considering the fundamental differences between the static Jewry in the German lands and the expanding, developing Polish-Lithuanian Jewry, without distinguishing between late medieval and eighteenth-century sources, or between prescriptive and descriptive sources (Katz, 1993, pp. 113–124). Jacob Goldberg, in turn, allowed his seminal study of Jewish marriage in eighteenth-century Poland to transcend geography in a somewhat different way. Although he meticulously combined narrative sources of Jewish and non-Jewish origin with census evidence, he assumed that the data from two neighboring voivodeships in southwestern Poland was 'representative of the Jewish population on a national scale' (Goldberg, 1997). Other studies have focused on individual towns or areas, making, at best, crude comparisons with often incompatible data from other sites (Jankowski, 2022; Markowski, 2008; Poniat, 2022; Szołtysek & Gruber, 2015a; Wysmułek, 2022; Zielińska, 2013). Such selectivity may have produced a sense of difference, though certainly not a sense of space. Much of the scholarship on the demography of the Jews in east-central Europe still relies on the juxtaposition of 'West' with 'East,' 'Germany-Austria' with 'Poland-Lithuania,' or, when considering the nineteenth and early twentieth centuries, 'traditional' with 'modern' (Botticini et al., 2019; Freeze, 2002, pp. 51–54, 2008; Michałowska-Mycielska, 2006, p. 161; Tuszewicki, 2021, pp. 55–64).

In this paper I focus on the second half of the eighteenth century, the period in which the authorities began to introduce censuses of Jews as part of a broad program to reform the states, but when the captured population *en masse* had not yet been affected by the blessings and drawbacks of urbanization, industrialization, medical and transportation advances commonly labeled 'modernization.' Firstly, I argue that space played an important role in shaping Jewish families, and that this diversity can be observed well before the demographic transition. Secondly, I suggest that much of the historian's discussion of *whether* the 'Jewish family' was complex has been futile, for the questions are rather *how*, *where* and *why* it was complex. By examining census microdata from thirty-four areas, I show that while early modern Jewish families generally varied along an east-west axis, the simple, dual model is insufficient to capture all variability. Evidence suggests that family forms can be placed into three major groups. Their high geographical coherence suggests that some family characteristics of these groups changed along with linguistic boundaries and politically imposed settlement conditions. Other features, such as the equality of in-laws, i.e. the balance between sons-in-law and daughters-in-law, transcended the large area of Poland-Lithuania. Accordingly, in Poland-Lithuania itself, where no legal family restrictions were imposed, instead of narrating the 'traditional Jewish family,' one should consider multiple traditions of Jewish families in the early modern period. In addition, I test the hypothesis connecting family forms to manorial economy, a link that has been proposed by historians (Goldberg, 1997, p. 28; Petrovsky-Shtern, 2014, pp. 217–219). However, instead of taking a hierarchical approach based on wealth, impossible to infer from early modern censuses, I test the key role that Jews

played in nobility estates, namely the involvement in leaseholding (*arenda*) of the manorial facilities. The logic behind such a hypothesis is that these large household-based enterprises required an additional workforce to be successfully run. As they were closely connected to the economic activity of the nobility, the finding that complex families appeared in eastern areas seems to corroborate the link, although, considering the data limitations, in a correlational rather than strictly causal way.

In many respects, the discussion of Jewish families is not just about another minority, but about the eastern European urban population in general. In many cities, especially in the eastern parts of Poland-Lithuania, Jews constituted the majority of the population and were solely responsible for creating the urban economic *millieu*. The diversity of Jewish family forms in early modern Europe shows that neither a distinct culture nor a leading role in urban economic entrepreneurship can be fully associated with specific family behavior.

2. Methodology

The study draws on the concepts of the family system and the statistical cluster. The family system is a set of religious values, social norms, and practices leading to the formation of kinship, obligations, and economic dependencies within and between families and households. The norms and practices, which include inheritance patterns and transfer of resources between households, as well as fertility and mortality regimes, define with whom a person shares living space at each stage of the life cycle and the roles played by co-residing relatives. Early contributors to the concept assumed that nuclear family households, consisting only of parents and children, were typically formed by late marriage and supported by domestic service with no family ties, while extended and complex families were formed by early marriage and consisted of a nuclear family and additional married or single relatives. These co-residing relatives provided an additional workforce, making domestic service unnecessary (Oppenheim Mason, 2001, pp. 160–161; Ruggles, 2012; Wall, 1998, pp. 44–48). The interdependence of all these elements forms a self-regulating, though not necessarily unchanging, system.

Available archival sources, when systematically coded from multiple areas, do not have to be arbitrarily assigned to pre-defined models. Instead, the social characteristics of each small regional population can be considered individually and statistically tested to determine whether they can be grouped into larger analytical categories, or perhaps whether a population constitutes a distinct category in its own right. Such clustering provides historians with a way to detect underlying social structures in a set of observations, in this case, populations in particular areas, with minimal assumptions about their nature, such as the East-West division commonly chosen intuitively by historians. Neither the number of clusters, nor their size is arbitrarily specified. The task of this unsupervised machine learning process is to extract the non-random features of the populations, whose class has not been predetermined, and group them in a statistically meaningful way. Data structuring is relatively easy to do 'by eye' when it involves one or two dimensions (defining variables), mainly because printing technology can use two-dimensional graphs to represent data, but the process becomes more challenging with increasing dimensions, i.e. a higher number of social characteristics defining a population, and for

reliability, it requires the unsupervised intervention of an algorithm. Algorithms (when set) classify similar observations into larger groups regardless of their geographic locations, they also aim to find clusters that best balance the internal variability of their members and separation from other clusters (Waggoner, 2021, pp. 6–8). In theory, such an approach can produce statistically coherent clusters that are spatially completely random, with no continuity between their members. In practice, as this study shows, the clusters are also spatially coherent. Social phenomena are not spatially random (Tobler, 1970).

Data clustering has recently been explored by Mikołaj Szołtysek and Bartosz Ogórek on non-Jewish European census data (Szołtysek & Ogórek, 2020, pp. 53–76). The study established that even if the evidence from across Europe can be matched into Hajnal's assumptions of the dual nature of European family taxonomy he proposed, a far better approach is to consider four basic models.

Statisticians have developed several methods for performing clustering. However, there is no universal agreement on which of them is the best. The basic types of clustering methods include those that divide all observations into mutually exclusive classes, known in statistical jargon as hard partitioning (k-means, medoid partitioning, hierarchical), those that assign each observation to more than one cluster based on a probability distribution (Gaussian mixture model, fuzzy C-means), or those that assign observations to a dense cluster with little variation, leaving outliers unassigned (density-based spatial clustering and application with noise) (Everitt et al., 2011, p. 5; Waggoner, 2021, p. 58). For the study of family forms, the use of hard partitioning algorithms seems most appropriate. It is safe to assume that each population belongs to a larger class. Because of constant migration, exchange of practices, and – particularly important in the case of the study of Jewish populations – participation in a large community that shared a distinct language and religious customs, there are no populations that can be considered unclassifiable 'noise'. In most extreme cases, whether due to sample randomness or actual local tendencies, hard partitioning algorithms are capable of classifying outliers into one-observation clusters, making sure that they are properly labeled (Szołtysek & Ogórek, 2020, p. 58).

Surprisingly, there is no golden rule in statistics for selecting particular clustering algorithms, nor for validating them. Statisticians have developed several methods for identifying clusters: locating their centers and measuring the distance between their members (Charrad et al., 2014, pp. 18–21). Since the rationale behind the procedures is mathematical rather than sociological, the selection of a particular algorithm and validation method for the study of the family system would be arbitrary. Clustering strategies that perform well are those that balance the connectedness and compactness of clustered observations with isolation between clusters. Connectedness measures the extent to which observations belong to the same cluster; compactness assesses the homogeneity of a cluster based on the inner variance; and isolation measures how 'distant' or dissimilar the clusters are. Each of these aspects can be computed in several ways, which is reflected in more than 30 validation indexes developed over the last decades. In practice, their use is determined by the popularity of commonly used statistical tools rather than objectively proven advantage. Another approach to cluster validation is stability testing, in which the selected clustering procedure is repeated with one variable removed from the data each time. Strategies that are unaffected by the removal of a variable and produce coherent clusters are considered stable. Again, at least four approaches to this method have been

developed, and none of them may provide a definitive answer, especially when working with data containing weakly correlated variables, as is the case in this study (Brock et al., 2008, pp. 1–5).

As there is no rule of thumb, in this study I apply the most commonly used algorithms for clustering into mutually exclusive groups. Whether these algorithms use a hierarchical approach (Ward, Complete, Average), that is group observations progressively until only one cluster is formed, or a non-hierarchical approach (k-means, PAM), that is group observations into a predefined number of clusters, is of secondary importance. While the concept of the family system itself does not have a hierarchical structure, a hierarchy in observations may result from political or economic constraints imposed on the Jews in some regions. In practice, the optimal number of clusters is determined by using each algorithm to generate several clustering approaches using from 2 to n clusters (10 in this study), and the results are validated against one another. In selection of the final clustering approach I apply the majority rule, a compromise recommended by statisticians (Charrad et al., 2014, p. 24).

3. The data

Early modern states, seeking to increase tax revenues and control the growth of the Jewish population, typically subjected Jews to censuses earlier or more frequently than any other group. As a result, although the Jewish population was a tiny feudal group, ranging from 1.5% of the total population in the German lands to about 5.5% in Poland–Lithuania, it is better documented in the archives than the remainder of the population. The main source for this study is the Census Microdata of Jews database, a collection of individual-level data from nominal censuses in east-central Europe.[3] The subset used to map the early modern Jewish family system contains information on 85,369 Jews living in 34 areas in the territories of Poland–Lithuania, Bohemia and Bukovina between 1764 and 1809. In addition, the dataset has been supplemented with information on approximately 20,000 Jews from the Great Duchy of Lithuania available through the Mosaic Census Project (Verbickienė & Troskovaitė, 2015). Most of the data comes from the randomly surviving census lists of the 1764–1765 census of the Jews and the 1790–1792 census of the Military Commissions of Public Order in Poland–Lithuania. Additional data comes from censuses conducted shortly after the partitions, mainly the 1795 revision of the Russian Empire. Data from Bohemia (1793) and Bukovina (1787), both under Habsburg control, provides additional spatial context.

Although the central and northern Polish Crown is less well represented in the data set, it is safe to assume that it reflects most of the historical variability in family forms in the lands of Poland and Lithuania, where the majority of the world's Jewish population resided at the time. The available data covers areas with different histories of Jewish presence and economic role. It includes Bohemia, where the earliest permanent Jewish communities are documented as early as the tenth century (Vobecká, 2013, p. 16), as well as Latgale, where Jews arrived latest and settled permanently at the turn of the seventeenth century (Šteimanis, 2002, p. 45). Throughout the area, Jews were involved in non-agricultural occupations, but local Jewish communities varied in the extent of their involvement in trade (weak in Bohemia, unlike other areas), in the manorial economy (especially common in eastern Poland–Lithuania), and in the percentage that lived in rural

areas -(Kasper-Marienberg, 2021, p. 38; Teller, 2016, pp. 113–116; Topolski, 1999, pp. 71–82) from as low as 5% in Kalisz voivodeship to as high as 90% in Courland.[4] Moreover, the data represents populations from different cultural contexts, such as Czech, German, and Polish, which is best reflected in the use of first names of non-Jewish origin in the data collected. Unfortunately, archival research did not reveal any nominal census lists that included all persons in clearly delineated units from Hungary and Prussia, two other countries with relatively large Jewish populations and strong historical ties to the Jewry of Poland–Lithuania.[5]

The range of information in the early census data from the late eighteenth century, although narrow compared to modern censuses, is sufficient to assess the basic characteristics of the Jewish family. In conceptualizing the family form at the quantitative level, this study draws on parameters that have been widely explored in research on family forms (Hanjal, 1983; Laslett, 1983, pp. 526–527; Szołtysek & Ogórek, 2020, pp. 53–58) (age at marriage, family structure, domestic service, headship attainment). Such an approach allows me to test the underlying relationships that John Hajnal, the founder of the family system concept, assumed to rule these parameters, in the different cultural, though still widely European context. In addition, a novel parameter was developed for this study, namely in-law equality, which measures the co-residential pattern typical of Ashkenazi families, the propensity of the newlywed to live with the groom's family as often as with the bride's. While these parameters, due to the lack of homogeneous interdependencies, may not fully reflect the concept and mechanisms behind the process of family formation, especially at the global level (Szołtysek et al., 2021, p. 85), they are capable of capturing the basic aspects discussed so far by demographers and family historians and, consequently, of redrawing the map of Jewish family forms in east-central Europe.

The six basic parameters used as variables in the clustering process are linked and defined as follows. *Age at marriage*, considered separately for men and women, is probably the most important aspect of both the family system and demographic behavior. In the early modern period, when most fertility took place within wedlock, age at marriage significantly regulated the number of offspring and the overall fertility of the population (Goldstone, 1986, p. 6; Schofield, 1989, p. 296). Early marriage facilitated the emergence of complex families, especially when newlyweds continued to live in the parental household. Late marriage contributed to family nuclearization and the increased need for outsourced domestic labor. While a small age difference between bride and groom is interpreted as typical of egalitarian communities in which intimacy played an important role in the selection of spouses, a large age difference is interpreted as a result of the subordination of marriage to aspects other than love. By delaying marriage, grooms ensured the economic security of both the parental household and their own new households (Van de Putte et al., 2009, pp. 1234–1237). As census takers did not register age at marriage, a synthetic measure called singulate mean age at marriage is applied, which estimates the measure based on the proportions of never-married persons in five-year groups between 15 and 49 as well as the extent of permanent celibacy (Hajnal, 1953). Singulate mean age at marriage for areas in which age was not provided was estimated based on the proportions of never-married persons, a parameter that proved to accurately predict age at marriage in areas where age was available.

Family nuclearization. The prevalence of families consisting only of parents and children contributed to mobility and independence of the younger generation from paternal (maternal) power, but also increased the demand for labor provided by unrelated persons. An extension of a family, if it occurred, was often aimed at maintaining its intergenerational continuity and providing support for the elderly. The founders of the family system concept, John Hajnal, Peter Laslett, and Richard Wall, focused on the analysis at the household level, assuming that the presence of relatives adequately described the propensity to live together (Hammel & Laslett, 1974; Hanjal, 1983; Wall, 1983). Accordingly, they perceived the proportion of households with no relatives, or the proportion of relatives to core family members, as reflective of the overall nuclearization of the family in a given community. Recently, however, Steven Ruggles has pointed out that actual household composition is the result of both propensities and the availability of particular relatives or other unrelated persons with whom a household can be expanded. Fertility and mortality actively change the pool of candidates for extension. Adults may not live with their grandchildren not because they prefer to avoid them, but because they have not yet been born. Similarly, they may wish to share households with siblings or parents, but the mere fact that some of them have died makes such choices impossible. Identifying true propensities requires shifting the focus from household to age-specific measures at the individual level (indicating who lives with whom at a given stage of life) and controlling for demographic conditions (Ruggles, 2012, p. 431). Due to the lack of age information for 21 data areas coded from the 1764–1765 census of Poland–Lithuania and the 1793 census of Bohemia, this study uses a traditional household-level measure derived from Laslett's typology: the proportion of families consisting of a single conjugal unit, unrelated persons, and solitary persons, whether among a householder's or inmate's families.[6]

In-law equality approximates the proportion of married daughters to all married children. While family nuclearization measures how common extended and complex families were in the communities under study, in-law equality indicates what the gender balance was among the children-in-law in downward extended families, the most characteristic forms of Jewish and non-Jewish complex families. Jewish families were influenced by the unique custom of *kest*, a formal agreement in the marriage contract granting the groom the right to reside in the bride's parental home for a few years. The custom ensured that a young man could live up to the basic principles of Judaism, channel his sexual urges in a religiously sanctioned relationship, raise a family, and continue his religious studies without 'wasting' time on paid work. It also provided better protection for their wives, who remained under the immediate physical and financial protection of their parents during the early years of marriage (Stampfer, 2010, pp. 14, 2020).[7] In-law equality measures the extent to which Jewish parents were ready to share living space with sons-in-law, whether under *kest*-specific or other type of *ad hoc* arrangement, and break from the tendency to share living space with daughters-in-law (married sons) typical for early modern non-Jewish families (Szołtysek, 2015, pp. 351–352). The parameter takes into account kinship arrangements beyond the immediate family of the householder and is expressed as the ratio of married daughters, granddaughters and nieces of householders and lodgers to all married children, grandchildren, nephews and nieces.

Domestic service. The presence of servants is considered one of the main factors influencing family formation and household composition, and is observed particularly in northwestern Europe. The circulation of young people in search of wage employment delayed marriage, after which few continued in service. Domestic service may have been universal not only because of its scale, but also because, at least in the early modern period, it did not entail a downgrading of social status and was practiced relatively equally by women and men (Hanjal, 1983, pp. 92–98; Poniat, 2014, pp. 140-–141). People called servants performed a variety of tasks that would often be carried out by a relative in complex families. First, they maintained the domestic comfort of the core family unit. Maids, cooks, wet nurses, nannies, and housekeepers ensured that the family had meals, food supplies, water, clean space, and a functioning home. Participation in production was another function of the service. Apprentices and personal secretaries contributed their skills to the household income. Perhaps the most typical service roles for Jewish families were private tutors who provided children with an intensive religious education, occasionally supplemented by secular education in fields such as foreign languages and bookkeeping. Another notable feature of Jewish domestic service was that, as a non-agricultural population, the service did not play an urbanizing role for Jews, as it did for (non-Jewish) young peasants, who often sought employment opportunities in nearby cities (Fauve-Chamoux, 2005, p. 5). The boundary between servants and other non-domestic servants, boarders, or orphans who contributed to the household through their work was not always clear, but the special role of servants in a family was reflected in their systematic inclusion in census lists, even when occupations were generally omitted. Moreover, since census lists rarely listed Jews and non-Jews together, it is not possible to account for non-Jewish service in Jewish households. Nevertheless, it is reasonable to assume that the increased role of domestic service in the formation of a Jewish family and household was proportionately reflected in the use of service-related occupational labels in the census lists of Jews; accordingly, domestic service is measured in this study as the share of Jewish servants in the total Jewish population. The contribution of non-Jews to the daily running of Jewish households remains beyond the scope of this research, but the available data for the three areas in which non-Jewish servants were exceptionally registered as members of Jewish households, southeastern Galicia, Latgale and rural Courland, suggest that they constituted a minority. In these areas, the share of non-Jewish servants accounted for between 15% and 28% of all servants.[8]

Headship attainment is used to estimate the elapsed time between marriage and age at assuming the role of head in a household, typically such a change in power would also be a generational change.[9] The extended period between the two events is indicative of several aspects governing a family system. Firstly, the young successor had to wait longer to take over the household in the presence of strong paternal power, which allowed the father to maintain the position for a prolonged period. His dominance could continue even when his vital forces began to weaken and he was no longer able to perform day-to-day production tasks. Secondly, the delay in attaining the patriarchal position was linked to the organization of production in the household. If it depended on members of the extended family, the transition of work roles often took longer. Finally, succession strategies and legal frameworks could delay the attainment of headship in conditions of strong attachment to property, the father's or local feudal lord's will to pass the property

(especially a farmstead) to one of the sons. Accordingly, in communities where complex families prevailed, it took much longer for a young person to become the head of a household, whether of a new or parental one. Early attainment of headship, in turn, often came from increased opportunities to establish a new independent household rather than from taking over an existing one (Sieder & Mitterauer, 1983, pp. 311–314).

Historians have emphasized that for Jewish families, the question of household succession was secondary to that of non-Jewish families. On the one hand, Jewish households, even if located in rural areas, were only exceptionally involved in agricultural production and working the land. The occupational profile of Jews facilitated intergenerational dependency and migration. The most common urban occupations of Jews, trade, crafts, and services, relied on movable property. Likewise, rural Jews depended on a lease with a nobleman of manorial property (inn, mill, distillery) for a term set in advance (*arenda*). On the other hand, Jewish families showed a more egalitarian approach to household membership and occupational roles, allowing sons-in-law to participate in the family business and women to be the primary breadwinners (Stampfer, 2010, pp. 52–53). As a result, it can be expected that Jews attained headship in less time than non-Jews, even in environments where complex families dominated.

4. Mapping Jewish families

Empirical evidence from the late eighteenth-century censuses of the Jews exemplifies some flexibility inherent to the clustering method with simultaneous strong geographic coherence. Validity tests of five clustering algorithms indicate that for the majority of available quality indexes, the most statistically reliable division of the data set, considering six basic variables defining a family system, is into two or three clusters (Table 1). The two basic types of tests, internal validity and stability, suggest two clusters for partitioning around medoids (PAM), Ward and Average algorithms; the other algorithms, K-Means and Complete, perform well with either at two clusters, when tested for stability, or at three clusters, when tested for internal validity. As a result, seven clustering schemes are proposed. The origins of the ambiguity in the clustering become clear when the geographic location of each area is compared with its cluster assignments. The sixteen most northeastern research areas are always assigned to cluster 1, and the five most western areas are always assigned to cluster 2. The thirteen areas located in between are assigned either to one of these two clusters if the two-cluster scheme is applied, or to cluster 3, when the three-cluster scheme is applied. In other words, the clustering reveals striking geographic geographic divisions, with western areas being assigned to a completely separate cluster 2 in four out of seven schemes considered. Central and northeastern regions have less statistically defined borders. One two-cluster scheme (Complete) assigns them entirely to the cluster 1, another three two-cluster schemes (K-Means, PAM, Average) split central areas between western and northeastern groups. Three-cluster schemes (K-Means, Complete) assign most of the central areas to cluster 3.

As the choice of any particular scheme for further analysis would be arbitrary, the areas are grouped into three major regions representing three basic types of Jewish family forms in east-central Europe. The peripheral Western and Northeastern regions encompass data areas which were consequently assigned to cluster 1 and 2, respectively. The Central region includes ‘swing’ areas, which are not only geographically but also

Table 1. Clustering of 34 regional Jewish populations in east-central Europe by the type of algorithm, 1764–1809.

	Non-hierarchical		Hierarchical		
	K-Means	PAM	Ward	Complete	Average
Validity test	Suggested number of clusters				
Internal validity	3	2	2	3	2
Stability	2	2	2	2	2
Area	Clustering schemes				
	Northeastern region				
Bratslav N	1	1	1	1	1	1	1
Bratslav S & Podolia E	1	1	1	1	1	1	1
Brest	1	1	1	1	1	1	1
Galicia SE	1	1	1	1	1	1	1
Latgale	1	1	1	1	1	1	1
Lublin & Podlachia	1	1	1	1	1	1	1
Medzybizh	1	1	1	1	1	1	1
Minsk	1	1	1	1	1	1	1
Podolia E & Bratslav E	1	1	1	1	1	1	1
Podolia W & Volhynia W	1	1	1	1	1	1	1
Ruthenia C	1	1	1	1	1	1	1
Ruthenia E	1	1	1	1	1	1	1
Ruthenia N	1	1	1	1	1	1	1
Ruthenia S	1	1	1	1	1	1	1
Viciebsk & Polack	1	1	1	1	1	1	1
Vilnius	1	1	1	1	1	1	1
	Central region						
Bukovina	2	3	2	2	3	1	1
Courland	1	1	1	1	3	1	1
Kalisz C	2	3	2	2	3	1	2
Kalisz CN	2	3	2	2	3	1	2
Kalisz N	1	3	1	2	3	1	2
Kalisz SE	2	3	2	2	3	1	2
Kalisz SW	2	3	2	2	3	1	2
Krakow E	1	3	1	2	3	1	1
Krakow N	1	3	1	2	3	1	1
Krakow W	1	1	1	1	3	1	1
Ruthenia CW	1	3	1	2	3	1	1
Ruthenia W	2	3	2	2	3	1	1
Sieradz	1	3	1	2	3	1	1
	Western region						
Čáslav	2	2	2	2	2	2	2
České Budějovice	2	2	2	2	2	2	2
Gdańsk	2	2	2	2	2	2	2
Klatovy	2	2	2	2	2	2	2
Žatec	2	2	2	2	2	2	2

Note: The suggested number of clusters is determined based on the majority rule. Thirty internal validation indexes implemented in NbClust function are used for the Ward, Complete, Average clustering scheme, three indexes of clValid are used for the PAM and theHartigan test is used for K-Means. Four indexes are used for the stability test (Charrad et al., 2014, pp. 4–19, 2014, pp. 3–5).

statistically located between the Western and Northeastern regions, and are assigned either to clusters 1 and 2 or, if the scheme allows, mostly to cluster 3. This final grouping is corroborated by the three-cluster scheme Complete, in which all central 'swing' areas are also assigned to a separate cluster. The statistical distribution of the areas grouped into three main regions is shown in Figure 1. The figure shows all six variables reduced to two principal components, allowing their approximate representation in a two-dimensional graph. Given that the two principal components retain 77.1% of the variance in the

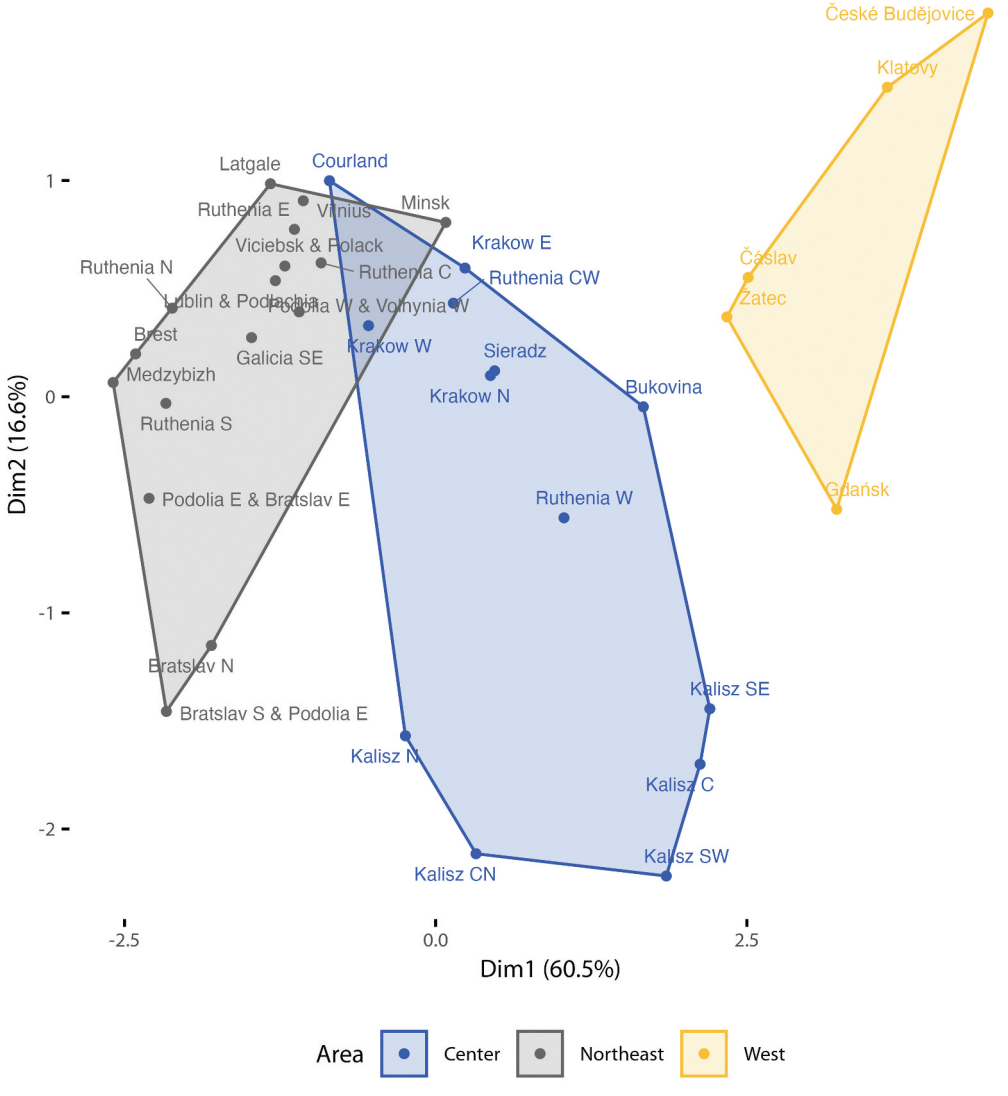

Figure 1. Statistical separation of regional Jewish family forms in east-central Europe reduced to two principal components, 1764–1809.

original six variables, it can be assumed that the figure visualizes well the overall statistical isolation and compactness of the clusters. The two principal components confirm that the Central region is well isolated from the Western region on the one side and relatively well separated from the Northeastern region on the other. However, some overlap between the Central and Northeastern regions reflects the continuity between the two. Areas that were assigned to either Central or Northeastern regions by some clustering schemes, Courland and Krakow W lie within the overlapping area. Bukovina lies at the other end of the Central region, close to the Western region, though it was considered statistically too far away to be included in it by most algorithms.

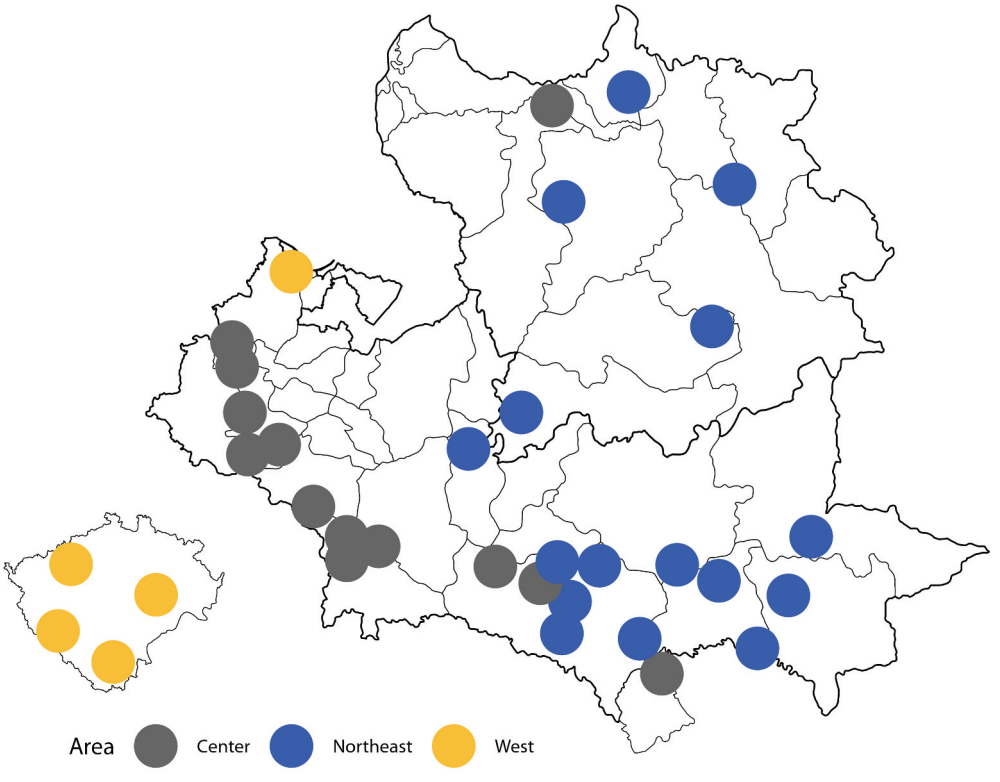

Figure 2. Spatial distribution of Jewish family forms by region, 1764–1809.
Note: GIS map source: Max Planck Institute for Demographic Research and Chair for Geodesy and Geoinformatics, University of Rostock 2012: MPIDR Population History GIS – Rostock.

Even though geographic location is not taken into account in the clustering, the results present a clear geographic pattern, especially when the historical context is taken into account (Figure 2).[10] The Western region covers Bohemia and Gdańsk, areas then under the influence of German culture and the restrictive regulations of settlement 'privileges' (*Familianten*, *Schutzjuden*) (Ebelová, 2020, pp. 92–96; Schulz, 2020, pp. 30, 270). The Central region covers the core lands of the Polish Crown (Kalisz, Krakow voivodeships and western Ruthenia), as well as Bukovina and Courland. These two seemingly detached regions on the peripheries had a local context which distinguished them from the Northeastern region. The small Jewish community in the Ottoman Empire was not incorporated into the Habsburg Empire as Bukovina until 1775. In the following decades, Bukovina became the destination of many immigrant families from Habsburg Galicia (Buzek, 1903, p. 97). Courland was mostly under the Livonian branch of the Order of the Teutonic Knights. Jews were allowed to settle in the area only when it became a vassal state of the Polish Crown at the end of the sixteenth century (Šteimanis, 2002, p. 12). The Ukrainian lands of the Polish Crown, the Great Duchy of Lithuania and Latgale are included in the Northeastern cluster, a vast territory to which Jews from the old Polish Crown moved and established

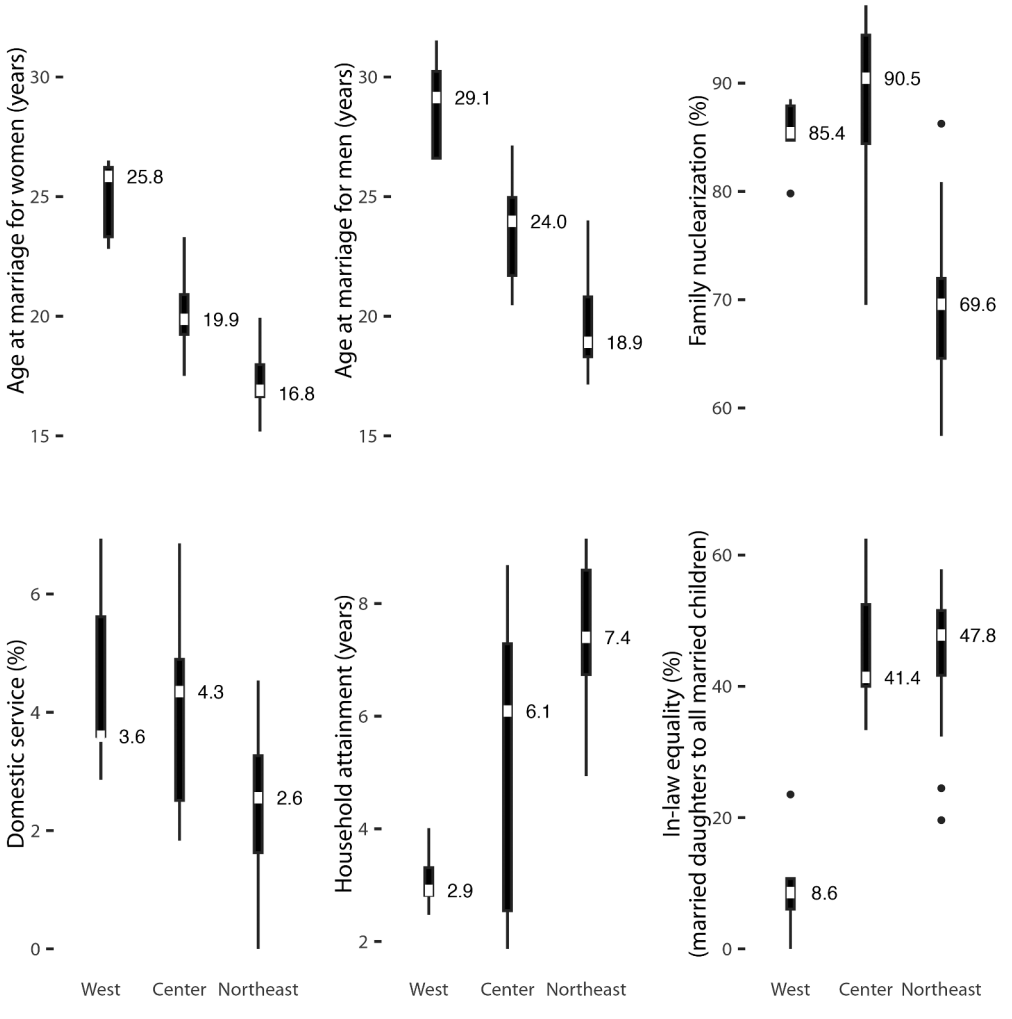

Figure 3. Parameters of Jewish family forms in east-central Europe by region, 1764–1809.

communities in close economic cooperation with the Polish-Lithuanian nobility (Rosman, 1990, pp. 40–41).

The use of cardinal geographic directions to designate the three research regions, Northeast, Center and West, and thus the three basic family models that emerged among Ashkenazi Jews in the early modern period, is only a matter of linguistic convenience rather than precise delineation. The directional names are not fully free of the notoriously simplistic Hajnalian classification pattern identifying south and east-central Europe as 'non-Europe' and northwestern Europe as just 'Europe', still persistent in historical demographers' jargon under the label 'European Marriage Pattern.' Although they may not entirely reflect nuances on their borders, they still reflect the overall regional nature of family forms without the need to refer to political, national or abstract labels.

Despite considerable regional variability, the 34 research areas fall into three major, statistically significant, Jewish family groups. Figure 3 shows box plots of all six variables

considered in the clustering grouped by research region. White gaps indicate median values, thick bars indicate values where the middle half of the observations fall (the interquartile range), thin lines cover most of remaining observations, and dots indicate extreme outliers (beyond one and a half times of the interquartile range). The evidence shows that in the West, Jews married the latest, with a median age of about 26 for women and 29 for men. The high age at marriage was associated with a high proportion of nuclear families (85%) and the opportunity to take over the household soon after marriage (about 3 years). At the other end of the spectrum, in the Northeastern region, women married as early as at about 17 and men married at 19. The newlyweds tended to remain in extended and complex residential arrangements, as only 70% of families (including inmates' families) were nuclear. Accordingly, the waiting period for headship attainment extended up to more than 7 years. The Center, as discussed, remained in the geographical but also the statistical middle, an intermediate family form zone with parameters between the West and the Northeast. In the Center, Jews married quite early, women at 20 and men at 24, and waited 6 years before taking over the household. Surprisingly, however, they generally tended to avoid co-residing with kins, as 90% of the families were simple, more than in the West.

Differences in the function of domestic service between the three regions seem to play a less prominent role, although the median values still follow the changes in family nuclearization. In the West, 3.6% of the Jewish population was employed in a position related to domestic service, in the Center, where the level of nuclearization was highest, 4.3% of the population was in service, and in the Northeast, with the lowest level of nuclearization, only 2.6%. The differences would be more pronounced if the (minor) non-Jewish contribution to domestic service had been registered in the census lists of the Jews. Nonetheless, the variability observed in the overall employment of the Jewish-only domestic service reflect the function of the service period in the formation of Jewish households, the subsidiary role in the workforce in the absence of kins.

The parameter of in-law equality, the proportion of married daughters to all married children co-residing with their parents, best captures the shared family pattern in the Central and the Northeastern regions and at the same time, the isolation of the Western region from both. While in the West only about 9% of the young generation still living with their parents after marriage were daughters, in the two other regions the sex balance was almost equal, with 41% in the Center and 48% in the Northeast. None of the other aspects of family formation under consideration were stretched on such a wide scale. In other words, Jewish parents in the lands of Poland–Lithuania were indifferent as to whether these were sons or daughters who lived with them after marriage. The in-law equality was universal and did not depend on family complexity. It persisted both in the Northeast, where complex residential arrangements were common, as well as in the Center where nuclear families dominated. As I discuss further below, the Jews of Poland–Lithuania differed in in-law equality not only from the Jews of Bohemia in 1793 and Gdańsk in 1809, but also from the non-Jewish population.

The distribution of each clustering variable on a map (Figures 4–9) allows for a quick visual assessment of the spatial patterns in each parameter of Jewish family forms across Bohemia, Poland–Lithuania and Bukovina. While the division into three regions obtained during clustering is generally justified, individual variables deviate in various directions. This spatial fluidity leads not only to indecisiveness of clustering with respect to thirteen central areas, but also

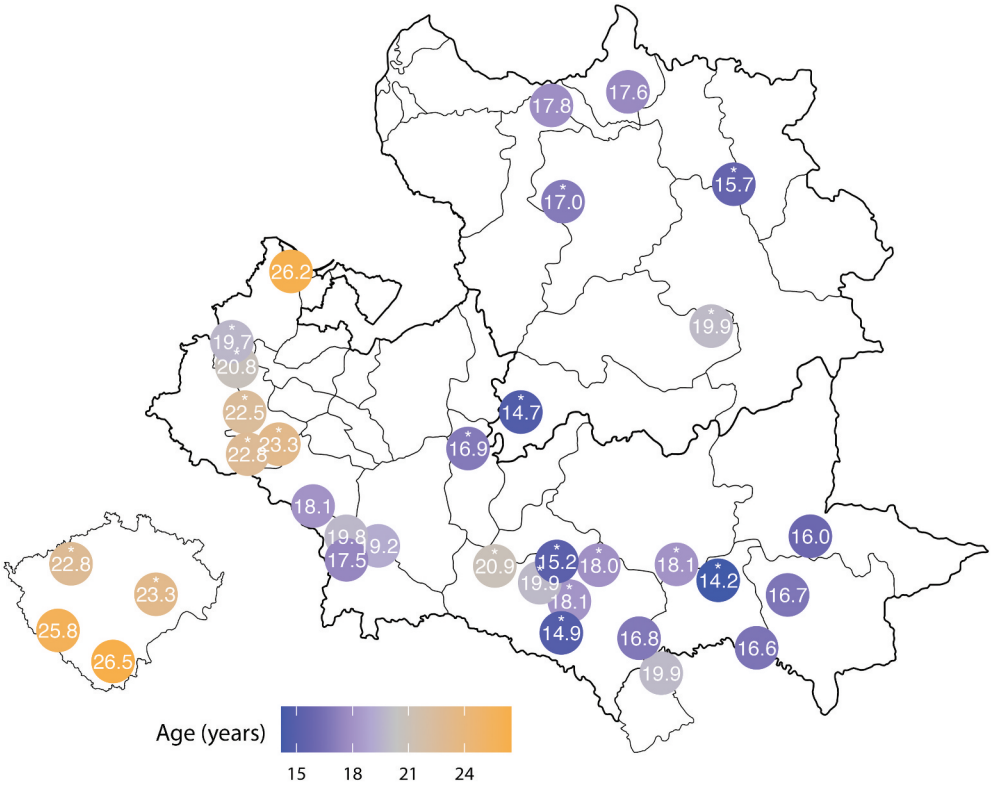

Figure 4. Mean age at marriage for Jewish women in east-central Europe, 1764–1809.
Note: Estimated values marked with *.

reveals some patterns of variability within each region. Two southern areas (*kraj*) of Bohemia, Klatove and České Budějovice, showed stronger Western family patterns than the two northern areas, Žatec and Čáslav. In many respects, north-south differences can be observed in the Northeastern region. Ukrainian Jews married slightly later and had stronger in-law equality compared to Lithuanian Jews. Differences within a region are naturally most pronounced in the Center, especially between the Krakow and Kalisz voivodeships. In the Krakow voivodeships, early marriage and late headship attainment made Jewish families closer to the Northeast, but the relative scarcity of domestic service closer to the West. Kalisz voivodeship, in particular its southern areas, showed the opposite pattern.

To what extent did the entire territory under study adhere to a common *system* regulated by established, predictable relations? The above discussion of the three major regions, with Western and Northeastern parameters often on the opposite sides of the scales suggests such relations, but the key statistical correlations are captured statistically only when all 34 areas are considered individually. The principal component analysis used above to reduce six variables to two dimensions allows for the plotting of correlations identifying key elements governing family forms in the gathered evidence (Figure 10). Arrows pointing in the same direction indicate a strong positive correlation, while the arrows pointing in opposite directions indicate a negative correlation. Perpendicular arrows indicate no correlation between the variables. In addition, short lines reflect a

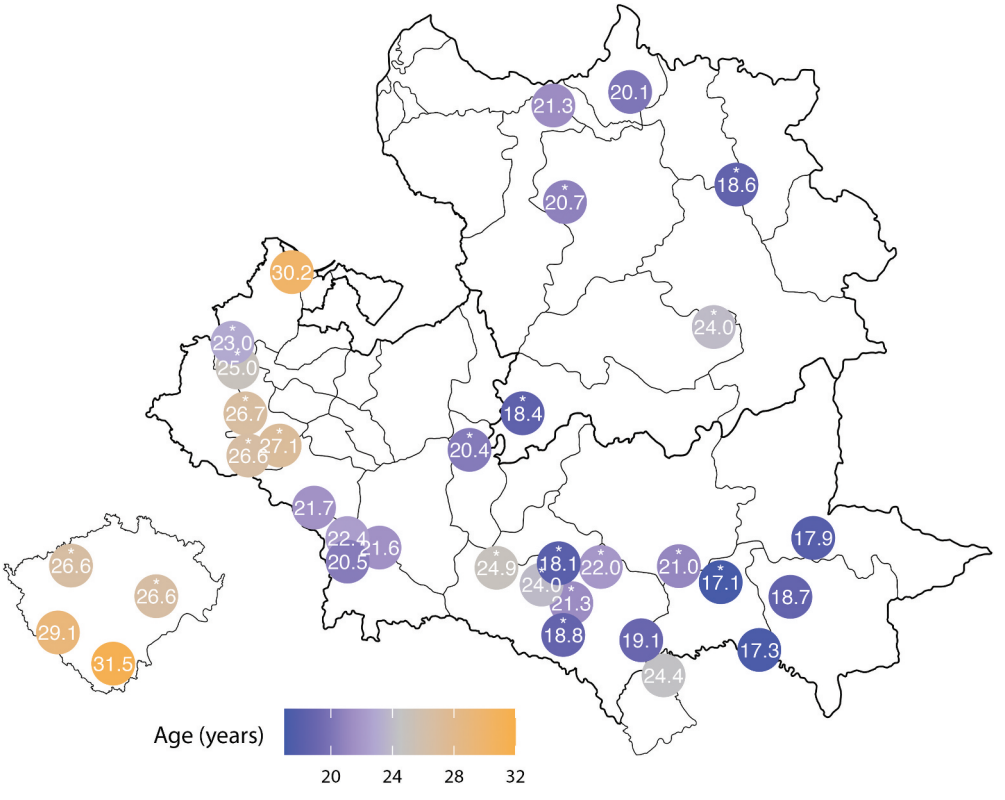

Figure 5. Mean age at marriage for Jewish men in east-central Europe, 1764–1809.
Note: Estimated values marked with *.

weak correlation with the two principal components that explain most of the variance and, consequently, their tertiary role in explaining the entire system of dependencies.

The correlation plot shows that the Jewish family system is primarily explained by the component consisting of age at marriage and the highly negatively correlated waiting time between marriage and headship attainment. As the age at marriage increased for men and women (mostly in a similar manner), it took less and less time for the newlyweds to become heads of households. The second element in the system was family nuclearization, which tended to be positively correlated with age at marriage. In general, when more marriages occurred early, more families tended to consist of more than one married couple. Domestic service and in-law equality, represented by the shortest arrows, played the least significant role in the system, showing no correlation with family nuclearization (perpendicular arrow) or all the remaining aspects (as expressed by the much shorter arrow). Their independence, as discussed above, is due to their broader, cross-regional stability. On the one hand, in-law equality tended to maintain constantly high levels in the Central and Northeastern areas, regardless of the preponderance of Jews who lived in complex family arrangements. On the other hand, many of the Central areas had as high levels of domestic service as the Western areas.

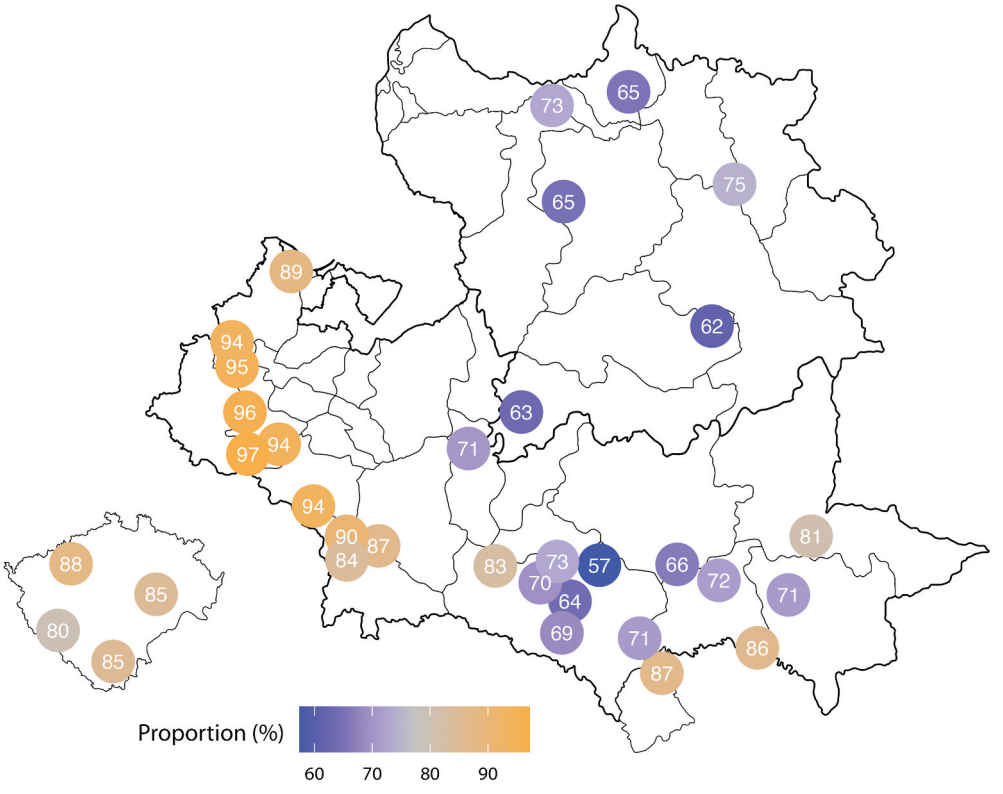

Figure 6. Nuclearization of Jewish families in east-central Europe, 1764–1809.

5. Diversity and unity

After the Holocaust, considerable research was devoted to reconstructing the daily lives of families in shtetls and small towns in eastern Europe where much of European Jewry resided. Researchers who tried to capture the lost world often resorted to generalizations, with a frivolous approach to both time and space. The conclusions were inconsistent, even if based on the same sources. As early as in the 1950s, Mark Zborowski reached two contradictory conclusions in two influential publications: 'Generally families try to live separately' (Landes & Zborowski, 1950, p. 464) or 'a three-generation household is regarded as a right family group, one that belongs together' (Zborowski & Herzog, 1953, p. 299). This ambiguity has persisted in historiography over the years, with historians aligning themselves on either side of Zborowski's visions of Jewish family, portraying it as either small (Katz, 1993, p. 113; Markowski, 2008, p. 129; Stampfer, 2010, p. 122) or complex (Boyarin, 2013, p. 85; Freeze, 2002, p. 31; Goldberg, 1997, p. 30; Guldon & Kowalski, 2003, p. 523).

The discourse on the Jewish family has been misguided by the nostalgic concept of collective eastern-European Jewry. The evidence indicates that the life cycle of Jewish families was locally shaped. In Poland-Lithuania there were no restrictions on Jewish

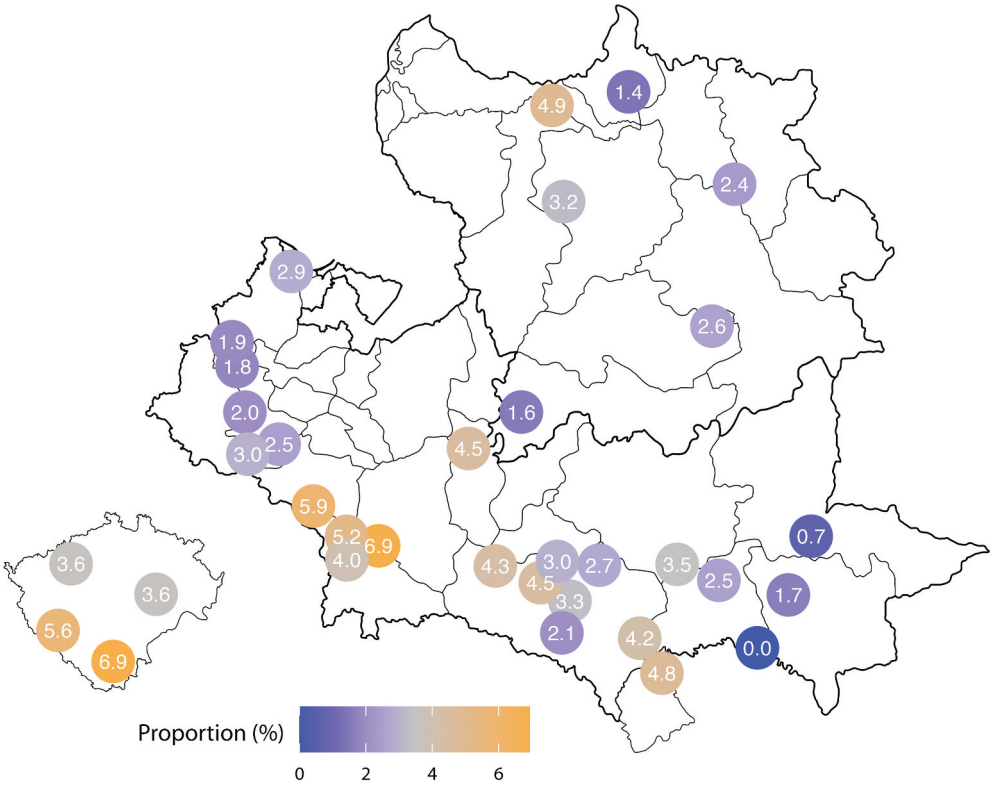

Figure 7. Domestic service among Jews in east-central Europe, 1764–1809.

settlement other than *de non tolerandis judaeis* in selected towns and those set by the laws of Judaism. Yet, under these free conditions the differences are striking. The proportion of families consisting only of parents and children extended from 57.4% in eastern Ruthenia to 97.2% in southwestern Kalisz. There were significant differences in the time it took for grooms to attain a household headship, between 6.2 years in Sieradz and 9 years in Bratslav and Podolia, the areas with available age data, and likely between 1.9 years in the center of the Kalisz voivodeship to 9.2 years in northern Ruthenia in areas with estimated parameters. Likewise, discussions regarding the usual age at marriage for Jewish brides and grooms need to change perspective. The question is not when, but (also) where. Age at marriage for women varied considerably between 16.0 in northern Bratslav and 19.8 northern Krakow in areas with age data available, and probably even more in areas with estimated age at marriage, between 14.2 in Medzybizh and 23.3 in southeastern Kalisz.

The tendency to depict the Jewish family in eastern Europe either as multigenerational or nuclear was supported by two seemingly exclusive key features of the Jewish family. On the one hand, the Ashkenazi Jewish family was often perceived as encouraging the independence of a grown-up offspring. It was argued that whereas family relations were important, the interests of the parental generation were not prioritized over the prospects of the offspring. In non-agricultural society, leaving home was much easier because the

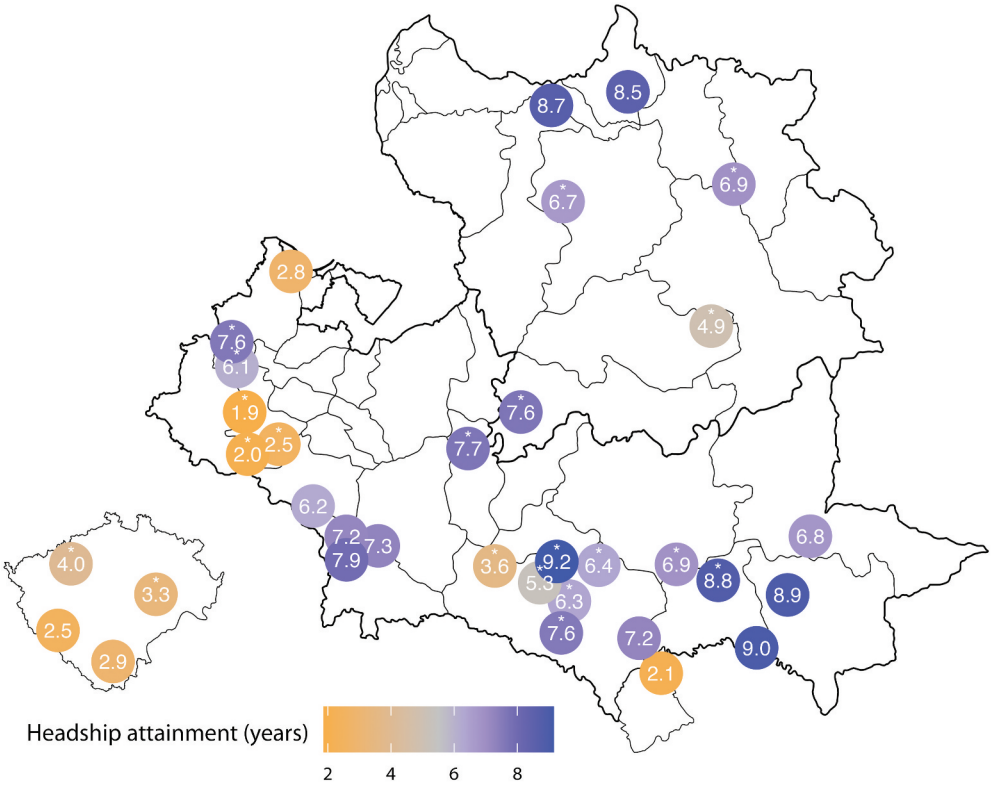

Figure 8. Headship attainment among Jews in east-central Europe, 1764–1809.
Note: Estimated values marked with *.

typical means of subsistence, crafts and trade, were far more divisible and portable than farming (Cantor & Brennan, 2000, p. 73; Stampfer, 2010, p. 53). On the other hand, *kest* was the key element that established the image of the Jewish family as a complex, downward extended entity. Ideally, fathers sought for their daughters young, talented scholars of the Talmud, the archetype of the masculine model in Jewish society, to host them for the period stipulated in the marriage contract. During that time, the ever-studying and practically unemployed son-in-law and his children were provided with free food and lodging and the parents-in-law gained respect in their neighborhood for perpetuating religious scholarship and creating a model, large family (Parush, 2004, p. 61; Stampfer, 2010, pp. 14–53). However, *kest* and nuclearity are not exclusive. Family is a dynamic, not static, institution. Demographers have pointed out that although at a given moment the great majority of families consist only of parents and children, temporary family complexity may have been a common family experience (Berkner, 1972).

Moreover, in theory, *kest* might have been a model to follow, but in reality only few could afford it, just as few could be brilliant scholars fortunate enough to find sponsors who relieved them of the burdens of paid work. Religious education rarely served as a springboard for upward social mobility. Typically, the time required to acquire knowledge greatly benefitted from the secure financial position, if not of the parents, then of the parents-in-law. As individual career trajectories (Jankowski, 2022, pp. 140–141) and

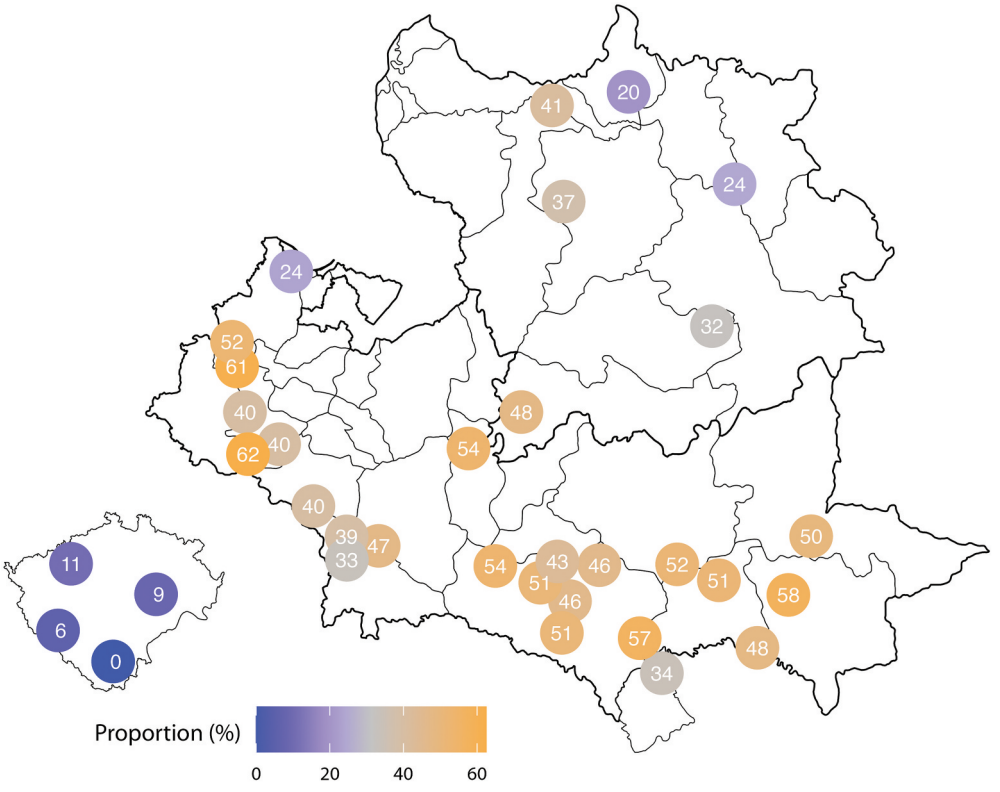

Figure 9. In-law equality among Jews in east-central Europe, 1764–1809. Proportion of married daughters to all married children.

memoirs show, becoming a renowned rabbi or a scholar required prior wealth. 'In most cases, an *orem-bokhur* [poor unmarried boy] became a *melamed* [teacher] who first, however, had to work as an apprentice in a *kheder* for a few years, tutoring' — recalls Pauline Wengeroff of mid-ninteenth century career prospects (Wengeroff & Magnus, 2010–2014, Volume 1, p. 188; also Shlomo David, 2020, p. XXXI). Practicing *kest* required wealth, far-reaching contracted family plans for the sons-in-law, and a lot of time to study, all assets unavailable for most people. However, the institute of *kest* established among the elites, even if not regulated by Jewish law or its local interpretations (*minhag*) (Stampfer, 2025), might have made married daughters and their husbands, sons-in-law, accepted among the Jewish masses in Poland–Lithuania for other reasons.

In Poland-Lithuania, *kest* and *kest*-like families never undermined the rationale for living together with married sons and their families, an arrangement typical for non-Jewish families (Szołtysek & Gruber, 2015a, pp. 351–352). Both models, known as uxori- and virilocality in demographic jargon, co-existed among the Jews of Poland–Lithuania and varied in intensity roughly in parallel creating astonishing in-law equality. Jewish homes were a space where daughters-in-law were as likely to be welcomed as sons-in-law. In eastern Ruthenia, where families were typically complex and as many as 43% of them hosted at least one kin, the proportion of sons-in-law to all children-in-law was 46%. On the opposite side of the map, in the southwestern Kalisz area in western Poland, in

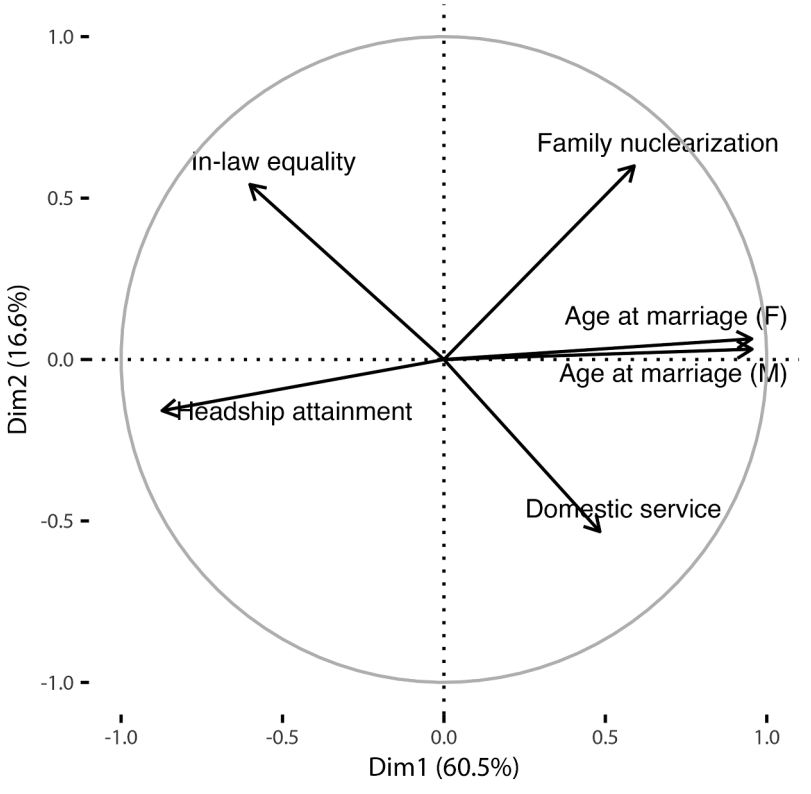

Figure 10. Correlation plot of variables used for clustering Jewish family forms in east-central Europe, 1764–1809.

turn, where only 3% of families were complex, the in-law equality was also high, with 63% of sons-in-law among all children-in-law residing at the parental house. Jewish parents might follow radically different residential practices, but they agreed on one thing: no in-law should be discriminated against on the basis of gender.

In-law equality mitigated gender inequalities in Jewish society, in which the most prestigious roles in public communal and ritual life were reserved for men. These particular model roles, placing the time-consuming study of Jewish law by men at the top of the everyday hierarchy, in particular right after marriage, opened, as Iris Parush argues, a 'window of opportunity' for women to take on some of the men's roles and, in consequence, household roles. While many husbands and fathers devoting hours at *beit midrash* (study hall) to exploring the intricacies of the Talmud lodged in a nearby town to soak up knowledge from a famous scholar and later, in the nineteenth century, vanished for weeks at remote tzadik courts, wives and mothers stood in storefronts, peddled in the streets and traveled far away on business (Parush, 2004, pp. 38–39). Jewish men may have remained the formal heads of the households, in particular for non-Jewish census takers, but it was often the women who ran the day-to-day business and family matters (Freeze, 2002, p. 64; Stampfer, 2010, pp. 121–141). For Jewish parents there was little advantage to be gained from precluding newlywed daughters and their bridegrooms from home, since they could continue to contribute to domestic matters just as well, or even better, than

their married sons. *Kest* and its much broader effect, in-law equality, contributed to the protection of newly married brides who could continue to reside at the parental house.

The outlying forms of the Jewish families in the Western region stemmed from the specific legal restrictions imposed on Jewish communities in Prussia and Bohemia and absent in Poland-Lithuania and later in its Russian and Austrian partitions. In Bohemia the restrictions, known as the *Familiant* Laws, were in place between 1726 and 1848. They set the maximum number of families in Bohemia at 8,541, allowed only first-born sons to marry, and required the rest to either remain single, leave the country, or pay a high tax for the permission to marry. The minimum age of marriage was 18 for grooms and 15 for brides. Families with daughters only were considered dissolved after the father's death (Ebelová, 2020, pp. 95–98). The General Privilege of 1750 in Prussia stated that only Jewish families who could prove assets of 1,000 Reichstaler could reside in the country. Once the number of privileged families had been established, their number could not be increased. The privilege could be inherited by an appointed child, son or daughter, or only son, if the father died before the heir was chosen. Other children had to pay 10,000 Reichstaler for the right to marry and have children (von Rönne & Heinrich, 1843, pp. 242-–243). A year after the partitions of Poland–Lithuania in 1772, the General Privilege in its local version was applied to the suburbs of Gdańsk where most of the local Jews lived (Schulz, 2020, p. 17).

Prussian and Austrian authorities sought to limit population growth by changing marriage patterns, regulating fertility, and forcing those Jews who could not afford to secure very expensive privileges to have no families or to emigrate abroad. By enforcing patrilineality, the authorities privileged sons over daughters and sons-in-law. Census data shows that by the turn of the nineteenth century, Jewish families in the Western region had undergone major changes. Jews in Bohemia and Gdańsk were the last ones to marry in east-central Europe with the most extreme case in České Budějovice where women stepped under the *chuppah* at age 26.5, three years later than in the Kalisz voivodeship and ten years later compared to many locations in eastern Poland-Lithuania. Since the options to marry off more than one child were limited, Jews tended to form simple families (80% to 89%) and preferred to live with married sons. Married daughters accounted only for 0% to 25% of all married children living in the parental house. The Hohenzollerns' and Habsburgs' political terms and economic exploitation of the Jews severely distorted family patterns.

Tracing the origins of the variability in family forms in east-central Europe, whether freely occurring in the Central and Northeastern regions or in the biased conditions in the Western region, is beyond the scope of this study, and likely beyond the capacities of the available census data. It is reasonable to assume that if Jewish families were complex in certain areas, it was not due to the direct popularity of *kest* itself, as it required assets available only for the elites. *Kest* might have encouraged the extension of families downward with sons-in-law and contributed to general in-law-equality among the Jewish masses, but the rationale behind locally increased family complexity, in particular in the Northeastern region, stemmed from the other benefits that such arrangements offered. Jakob Katz (1993, p. 117) noted that the several years following marriage provided young sons-in-law, just like married sons, a perfect initiation into parental occupational skills. Since Jews shared a basic occupational, non-agricultural profile, cultural background, and

position in the feudal structure of Poland-Lithuania, tracing the origins of the variability requires the identification of local factors.

Variability in family forms in Poland–Lithuania at the end of eighteenth century was also observed among Christian peasants, the social group that has been studied spatially most extensively to date. Mikołaj Szołtysek's research (Szołtysek, 2015, pp. 605–774) reveals a general propensity of the families to turn complex in the east, though still varying in their particular kin composition. For instance, families in Podolia tended to be simpler, though less dependent on domestic service than in western areas. In Polesia, households often consisted of several conjugal families, typically formed by siblings. Szołtysek points out that the changing conditions in the manorial economy played a significant role in residential arrangements, corvée contributed to household division, while quit rents and relaxed seigniorial control might have contributed to more complicated co-residential arrangements. The latter factors, further combined with specific environmental conditions, such as lower density of trade routes, cattle farming and the periodic need for recovery after wars resulted in a general higher family complexity in eastern Poland-Lithuania.

Although Christian peasants cannot be directly compared with Jewish, non-agricultural communities, the role of the Jews in the manorial system also needs to be considered. Jewish settlement in the western lands of Poland was closely tied to the early initiatives of the kings, who had invited Jews to provide services indispensable for developing state wealth: long-distance trade of luxury goods, minting, and money lending, mining and salt production. Jews primarily settled in crown towns where they gradually turned to small scale trade and crafts. Following the annexation of Red Ruthenia in the second half of the fifteenth century, the kings used Jews and the new mercantile connections they offered as agents of integration of the newly acquired territories with the Polish Crown (Kiryk & Leśniak, 1991, p. 22; Heyde, 2010, pp. 156–163). From the sixteenth century, however, in particular after the removal of Jews living in private estates from the king's jurisdiction (1539), the union with the Grand Duchy of Lithuania and the successful attempts of Christian burghers in crown towns to limit Jewish activity by obtaining *de non tolerandis judaeis* privileges, Jews began to settle in private estates, gradually progressing towards eastern Poland-Lithuania. The nobility invited Jews, who, unlike Christian burghers, posed no political threat, to stimulate the local economy and run the markets. In private towns, Jews often appeared soon after their foundation, and became the demographic majority, the backbone of trade, crafts and of the urban *milieu* in general (Guesnet, 2018, p. 798; Kaźmierczyk, 2016, pp. 361–363; Teller, 2018, p. 585). In villages (and to some extent in towns) Jews became the nobility's agents leasing local infrastructure to run distilleries, inns, mills, and collect customs (Teller, 2016, pp. 66–69). From a broader perspective, the Jewish-noblemen alliance responded to environmental conditions by attempting to urbanize the region and ensure its economic recovery after numerous wars and uprisings. The Polish-Lithuanian information gathering system seems to recognise the basic economic role of the Jews in the late feudal manorial economy. Despite the general lack of attention given to the occupations of respondents, the 1764–1765 and 1790–1792 census lists systematically indicate Jews involved in leaseholding. A similar supportive role for Jews in the manorial economy was established in Bohemia, where they mostly lived in small towns and the countryside in groups consisting of one or several families unable to create local communities and uniting individually in regional structures. Such

Table 2. OLS regression model of household nuclearity, 1764–1809.

	Estimate	Standard Error	t value	Pr(>|t|)
(Intercept)	0.28406	0.15235	1.864	0.073158 .
Proportion of leaseholders	−0.38742	0.14024	−2.762	0.010197 *
Census type (reference: 1764–1765 census)				
1790–1792 census	0.20566	0.05349	3.845	0.000666 ***
1795 revision	0.19038	0.06724	2.832	0.008646 **
Other	0.07923	0.00765	3.397	0.002125 **
Age at marriage (F)	0.02599	0.007252	2.786	0.00947 **
Legal limitations (reference: Yes)				
No	−0.14352	0.07843	−1.830	0.078335 .

Signif. Codes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, . $p < 0.1$.
Residual standard error: 0.09196 on 28 degrees of freedom.
Multiple R-squared: 0.6262; Adjusted R-squared: 0.5594.
F-statistic: 9.381 on 5 and 28 DF, p-value: 2.449e-05.

arrangements exposed Bohemian Jewish families to constant renegotiation of settlement terms even before the *Familiant* Laws (Kasper-Marienberg, 2021, pp. 29–30).

Although the limited number of observations does not allow for accounting for complex modelling, basic regression accounting for key explanatory factors, female age at marriage and the type of census (as these varied in the detail on occupations) reveals a link between family complexity and involvement in the noblemen's economy (Table 2). The test shows a significant negative correlation between the proportion of nuclear households and the share of leaseholders in 34 areas. The link seems reasonable, as a typical *arenda*, consisting of several facilities, such as an inn, distillery, a store and a small garden, required an increased workforce that a single conjugal family could not provide: administrators, cooks, waiters, maids, spirit makers. Buildings forming an *arenda* (Figure 11) were typically larger than regular village houses and capable of accommodating families of increased size (Petrovsky-Shtern, 2014, pp. 246–255). Moreover, the regression analysis likely confirms the role of the legal limitations in Prussia and Bohemia in the reduction of family complexity. The combination of these two opposing factors, involvement in leaseholding and the system of settlement rights forbidding more than one child to marry and stay in the parental place of residence, resulted in a level of household nuclearization in the Western region that was between the levels observed in the Central and Northeastern regions.

In the discussion on the origins of variability in family composition, additional cultural factors can be considered. It is striking, however, that the data from Poland to Lithuania forms two major regions, the Northeastern and Central, whose boundaries largely converged with the Yiddish dialect range. The Northeastern region with low age at marriage and more complex families covers the area where northeastern (Lithuanian) and southeastern (Ukrainian) dialects were spoken. The Central region covers the area where primarily mideastern (Central, Polish) and Baltic dialects of Yiddish were spoken. The boundaries of mideastern dialect, within which Bohemia and Gdańsk fell, were surrounded on three sides by western Yiddish (Herzog, 2000, pp. 25–27; Verschik, 2005). The eastern Yiddish dialects, which began to solidify as separate entities in the seventeenth century (Beider, 2015, pp. 465–478), were obviously not the direct reason why Jews in some areas married earlier than in others or when they decided to leave parental house, but they did designate the space of everyday communication that facilitated the sharing

Figure 11. A Jewish inn in Yaryshiv (Podolia, Ukraine), 1930. Photo by Pavlo Zholtovsky
Source: Vernadsky National Library of Ukraine, Manuscript Institute, call no. 278/473, f. 1025.

of practices, views and social norms. Each person in the Ashkenazi continuum was immersed in multiple communication communities, to use Szreter (1996, pp. 546–549), each with its own cultural codes formed by parental family, neighborhood, or synagogue gatherings, each providing a feeling of belonging and recognition, and, in consequence, facilitating and limiting the spread of attitudes toward marriage, household members and work roles. In the late eighteenth century, the period covered by the data, when Hasidism and Haskalah had not yet left a sizable imprint on Jewish society, Yiddish dialects were the primary markers of Jewish groupness, setting apart entire families and regions and instilling a sense of pride and a pinch of othering mischief in everyday communication. Linguistic research shows that dialects, just like family forms, can only be roughly delineated. The two major transitional zones of 'prolonged linguistic and cultural contact along relatively fluid "borders", (. . .) channels of linguistic and cultural innovation' (Herzog, 2000, p. 25) correspond to observed family patterns. The northeastern and southeastern Yiddish dialects and the transitional zone between the two fell under the large Northeastern family region. The mideastern dialect area, also considered a central transitional area, between western and eastern dialects, corresponded to the fluidity of the Central family region, as discussed above, sharing properties of the two fringing family regions.

The notion that maps of Yiddish dialects and Jewish families largely converge is not intended to suggest a simple causal link between the two. Rather, both originated from deeper processes that led to divisions within the Ashkenazi community. Jewish

settlement routes originating mostly in the Rhein area through Bohemia, Silesia and southwestern Poland in the High Middle Ages and spreading further across Poland and Lithuania highlight a shared cultural heritage. Religiously sanctioned social separation from Christians, shared rabbinical authority and language created a unique Ashkenazi continuum across the entire study area. But from the early modern period on, long-distance migration lost its importance for regional mobility and natural population increase (Stampfer, 2012, 2018). By the end of the seventeenth century, several communication communities emerged, primarily marked by Yiddish dialects, but also by the varying socio-economic functions discussed above. Future research may statistically show causal relations between these various factors and family forms of the Jews, although early census data, which often lacks detail, will not facilitate this task.

The entanglement of Jewish communities in general society is evident in the alignment of key aspects of family formation with the interactions observed in non-Jewish families in Europe. As predicted by John Hajnal, a decreasing of age at marriage allows for more complicated family arrangements, especially for multigenerational families, and the delayed attainment of headship. Despite the separate cultural heritage and entirely urban nature, the same correlations as for non-Jews ruled over Jewish families in east-central Europe. Moreover, the data on the Jews reflects a general Hajnalian east-west directionality, with nuclear families much more common in the western lands of the Polish Crown and Bohemia and complex families more common in the east. But just as in the case of peasant families that did not subordinate to the Hajnalian rules of thumb and geographic duality, in particular in southern Europe and some regions of eastern Poland–Lithuania (Szołtysek, 2015, pp. 771–780), Jewish families also exhibit idiosyncrasies. The two-pole approach is inadequate in capturing the family system of the Jews and the three groups of this study more accurately reveal the variability of forms. In such terms, Jewish family forms also corroborate the recent shift in historical demography stressing the rationale for dismantling the two-pole system (Micheli, 2018). Three regions are more accurate not only because of the specific role of in-law equality in Poland–Lithuania, but also because of the weak role of domestic service in family formation. There were relatively few Jewish servants, even in the Western region (4–7%). Whether the region in question can be called 'transitional' in the case of the Ashkenazi Jews is another matter. The Central region, which exhibits selected features of the other two regions – sometimes in their extremes as in the case of domestic service and nuclearity – rather undermines the universality of Hajnal's correlations. When measured at the level of all 34 areas, Jewish domestic service did not correlate with age at marriage and family nuclearization. Contrary to Hajnal's prediction, the circulation of young people as servants did not necessarily delay marriage. Simple Jewish households were able to secure an additional labor force by relying on communal networks extending beyond a household.

6. Conclusions

The tremendous changes in east-central Europe in the nineteenth and early twentieth centuries led many historians to view the history of the Jewish family primarily as a function of time. Rapid secularization, increase in age of marriage, spread of divorce, and early demographic transition occurring in sectors of the increasingly fragmented Jewish society redefined the shape of the Jewish family (Freeze, 2002, pp. 51–161;

Jankowski, 2022, pp. 103–110). The rise of Modern Orthodoxy and Hasidism with their rhetorical emphasis on tradition further emphasized these new changes. Modernization, as opposed to tradition, was often narrated as the key driver of change in the Jewish family (Boyarin, 2013, pp. 57–58; Hyman, 1989). Early modern census data adds a spatial dimension to the history of Jewish families, revealing significant dynamics in what might appear to be a static 'tradition' when viewed through the lens of later changes.

The misconception of the 'traditional Jewish family' arises from the expansion of the cultural idea of tradition on the demographic field. There was certainly a common denominator for all Jewish families that adhered to the traditions of Judaism, such as keeping kosher, forbidding religious intermarriage, condemning premarital sex, and also allowing divorce. Loyalty to Judaism, including by the pioneers of the Haskalah, which was universally manifest until the end of the eighteenth century, did in no way prevent the Jews from adapting their demographic behavior and family forms to local conditions. Legal limitations in Prussia and Austria induced changes in family forms, though not necessarily immediate social 'modernization'. Ashkenazi Jews in Poland–Lithuania continued diverse family patterns or, as could be said with the benefit of hindsight, family traditions. This diversity existed despite the universal recommendations of Jewish law for relatively early marriages. At the same time, what united most Jewish communities across Poland–Lithuania, *kest* and its broad social implication, in-law equality, was not directly prescribed in Jewish law. Ironically, it was these practices that were the most unusual and made the Jewish family *Jewish*.

Notes

1. I would like to thank Shaul Stampfer for his invaluable comments on an early draft of this paper and Karen Wasilewska for editing its final version.
2. Recent examples of this process are the renaming of the journal *Cahiers du monde russe: Russie, Empire russe, Union soviétique, États indépendants* to *Cahiers d'histoire russe, est-européenne, caucasienne et centrasiatique* and the emergence of RUTA Association for Central, South-Eastern, and Eastern European, Baltic, Caucasus, Central and Northern Asian Studies in Global Conversation in 2024.
3. More on the database, the origins of census taking of the Jews, availability, strengths and limitations of the sources will be published in my forthcoming paper (Jankowski, in press).
4. Own calculations based on the database; Hoheisel (1982, Tables 1–2); and Plakans & Halpern (1981, p. 20).
5. Geheimes Staatsarchiv Preußischer Kulturbesitz, Verwaltungs- und Justizbehörden bis 1808. (1713–1809), (call no. I. HA Rep. 104, IV A Nr. 394; II. HA, Abt. 15, Materien. Tit. CCV Nr. 4; II. HA, Abt. 7, II Materien Nr. 4791–4792; II. HA, Abt. 21, Städtesachen. Tit. 93 Nr. 7.
6. The main reason why the composition of both the householder's and inmate's families is considered in the overall structure is that in urban settings, unlike in rural ones, the census takers struggled to delineate clearly the boundaries of a Jewish household. For this reason, I am convinced that the inclusion of household size as another variable defining the family system has the potential to distort rather than improve the results.

   While there is little doubt that in rural areas each house (*dom*, *domostwo*) commonly represented one household (Łowmiański, 1998, p. 257; Szołtysek & Gruber, 2015b, p. 294). In cities, towns and Jewish leaseholds, however, some buildings could consist of more than one dwelling, each inhabited by both a householder's family and possibly, in addition, their inmates. Consequently, differentiating multiple family houses from multiple-household

houses is a challenge. Listings of the Jews showing blocks of individuals living in a large unit labelled 'house' may reflect not a household, but a house (premises) of several households. Houses in early-modern towns often had additional storeys for lodgers, servants and apprentices. According to the 1669 inventory of the Jewish quarter in Przemyśl, a quarter of the buildings there had more than one storey (Goldberg, 2002, p. 438). Perhaps chimneys are a better approximation of the number of dwellings per house, due to the formative role of a stove for in-group relations, though it is likely that a few dwellings of the richest strata may have had more than one chimney. In Wieluń at the end of the eighteenth century, only about 10% of houses had two chimneys and 3% three or four (Baranowski, 1975, pp. 86–97). These extended structures posed a challenge to census takers attempting to delineate domestic units. Ambiguity in the registration of house dwellers unrelated to the householder can be clearly seen when comparing two versions of the 1791 census of Stara Częstochowa. According to one listing, there were two houses in which the secondary chambers (*druga izba*) were occupied by lodgers (*komornik*), Marek Lewkowicz and Abram Moskiewicz, while in the other list the two lodgers were indicated as householders (*gospodarz*) (Archiwum Narodowe w Krakowie, Akta Komisji Porządkowej Cywilno-Wojskowej Województwa Krakowskiego, call no. 30/47, f. 97).

7. Stampfer, *Families*, 14; Shaul Stampfer, 'From a Phenomenon Without a Name to a Name Without a Phenomenon: The History of Kest,' (unpublished manuscript, 11 February 2022), typescript.
8. Jakub Wysmułek (2022, p. 161) notes that the 1578 Lviv poll tax register only lists Christian servants and no Jewish ones. The absence of Jewish servants appears to be a consequence of the structural deficiencies of registration rather than actual lack of Jewish servants. For instance, while not impossible, it would have been challenging to substitute all the Jewish cooks and other servants who dealt with food in the community with non-Jewish ones. The latter would require intensive training in Jewish dietary laws.
9. For the estimation method, see Szołtysek and Ogórek (2020, pp. 57–58). For regions with no age data available, the parameter is modeled based on the proportions of married men and proportions of married male householders.
10. In the case of this research, algorithms that do not consider geographic location have two advantages over spatially constrained clustering (regionalization) schemes. Firstly, they produce more nuanced clusters, capable of indicating potential spatial outliers. Regions such as Bukovina and Courland may, to some extent, stand out due to their different cultural and institutional backgrounds. Secondly, due to historical losses as well as varying information gathering systems, the database does not cover the entire area of east-central Europe equally. Some areas, such as Silesia, Moravia and central Poland, Polesia and Volhynia are not represented in the database, which makes it impossible to consider spatial contiguity, the basic element of geographically informed clustering, in the model (Guo, 2008).

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