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Changing Structures of Opportunity: A Life-course Perspective on Social Mobility and Reproduction

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Analysing trends in the social openness of society has for decades been a central aspect of sociological research on inequality. In this tradition, I describe long-term developments of intergenerational social mobility and reproduction in (West) Germany during the 20th century, paying particular attention to relevant mechanisms and conceptual issues. The empirical analyses draw upon data from all cohorts of the (West) German Life History Study (GLHS). They integrate selected aspects from life-course research and demography into mobility analyses, such as a focus on the family context, links between inter-generational and intra-generational mobility and a prospective conception of mobility. Results indicate that a trend towards more openness has obviously slowed down or even reversed for the cohorts born after the mid-1950s. Cohorts also differ in the biographical timing when the impact of inter-generational mobility unfolds. Social mobility and reproduction are stepwise processes that are structured by families, employment and, in particular, education. The analyses demonstrate the value of life-course data for macro-sociological analyses.

Introduction

Degrees of inequality in society have frequently been the object of public discussion and concern about distributive justice. At least equally important, however, have been questions about the social openness of society and the permeability of its structures of inequality. According to Sorokin (1959), *social mobility* can be defined as the movement of individuals or social units among the social positions in a society. Social mobility can legitimise considerable social inequalities among such positions, in particular in combination with meritocratic principles. The promise of successful advancement up the social hierarchy due to individual effort (exemplified in the "American dream") may reduce social class identification and the potential of collective class action. Such openness is also the basis of an effective and legitimate allocation of human resources in the economy. Widespread perceptions about strong impacts of social origin on life chances are a potential threat to such legitimacy beliefs. There is also a further negative aspect of mobility, exemplified in fears of social descent which has been assumed to be a recent problem particularly for intermediate social strata. Empirical research on social mobility has been complemented by discussions about adequate research methods.

As a brief review of the dominant approaches in social mobility research (see the following section) suggests, the life-course perspective, as well as demographic approaches, can make important contributions to an analysis of social mobility and reproduction. The following empirical analyses will therefore look more closely into relevant mechanisms, paying attention to the role of the family, education and employment and acknowledging gender differences in these developments. I will describe selected historical trends in social mobility in Germany drawing upon data

from all cohorts of the (West) German Life History Study. The paper thus aims to demonstrate the value of empirical life-course data in general and the GLHS data in particular for structural analyses. While such structural analyses remain – for life-course analyses – on a rather aggregate level, I maintain that social mobility research is enriched by taking the life course more fully into consideration – and that life-course research can still benefit a lot from aggregate analyses of social mobility.

Analytical Concepts of Social Inequality and Mobility

Any mobility analysis needs a particular metric of the inequality structure against which individual movements and attainment can be measured. Two main approaches can be distinguished: the use of (not necessarily hierarchically ordered) social class categories and the application of measures of social status. In practice, occupation-based constructs are used in both traditions, but their rationale is quite distinct: Class categories represent typical employment relations while status represents typically conferred social honour (Chan and Goldthorpe, 2007). A standard class schema, particularly in international comparisons, is the Erikson/Goldthorpe/Portocarero (EGP) schema (Erikson and Goldthorpe, 1992). In contrast to class-based approaches that distinguish a set of distinct class categories, social status is typically measured as quasi-continuous in the form of occupational prestige or with combined indicators – in particular, "socio-economic status" as a combination of education, income and occupational prestige. Such a scale may also be derived from friendship or marriage patterns (e.g., Prandy and Jones, 2001), which makes its embedding in social relations particularly visible. As analytical concepts, class and status categories do not necessarily have clear boundaries in everyday life, though there is a discussion about socially meaningful categories (e.g., "micro classes": Weeden and

Grusky, 2012 – or, especially in the German context, occupations). Other simple measures of vertical inequality include income and education as important resources for social actors.

Classic Sociological Perspectives on Inter-generational Links

Using such metrics, mobility research has looked at intra-generational mobility, i.e. social mobility within individual life courses, but more dominant has been research on inter-generational mobility, i.e. social mobility between the different generations of a family. According to the systematisation by Ganzeboom *et al.* (1991), social mobility research started as part of thematically broad socio-structural studies. These studies were succeeded by more specific analyses assessing the role of social background in the process of status attainment, before models of intergenerational mobility tables became most prominent (for an overview, see also Treiman and Ganzeboom, 2000; Breen and Jonsson, 2005). Rather than a clear succession, however, both latter approaches focus on different aspects: Social mobility tables have become the standard instrument in macro-level intergenerational mobility research. They cross-tabulate the joint empirical distributions of the social position categories of, in the classic version, fathers and sons or, more generally, parents and children. In a further analytical step, (e.g., log-linear) statistical models are fitted to the tables in order to receive a parsimonious representation (cf. Breen, 2004b). This high level of analytical aggregation facilitates conducting international and long-term historical comparisons that inform about inequality relations in whole societies. The procedures also allow a distinction between absolute mobility and relative mobility in a comparison of social groups (”social fluidity”) as well as between structural mobility due to change in marginal distributions and its opposite, “circulation mobility”. Earlier empirical studies

have found a relatively high degree of stability and few international differences in patterns of intergenerational social mobility encouraging the hypothesis of general similarity in social fluidity (Featherman *et al*., 1975), at least when controlling for a country's stage of economic development. Further research (Erikson and Goldthorpe, 1992; Breen, 2004a) did find differences, but few hints about systematic variation. Social closure in Germany has traditionally been exceptionally high (Müller and Pollak, 2004).

Status attainment research in the tradition of Blau and Duncan (1967) and Sewell *et al.* (1969) and looks at the micro-level determinants of the occupational attainment process rather than the development of macro-level structural constraints. Acknowledging that education is an important mediator of social inequality in modern societies, the focus is on three main aspects: (1) associations between social origin (i.e., parental status) and education; (2) associations between education and occupational attainment; and (3) (direct) associations between social origin and occupational attainment. Taken together, these form an "O-E-D-triangle" between *o*rigin status, *e*ducation and *d*estination status.

Social Mobility, Life-course Research and Demographic Perspectives

Standard methods of social mobility research have, despite their conceptual simplicity, proven to be powerful instruments for showing how persistent inequalities of opportunity are, not least because this simplicity allows their use even when only data with very few variables is available. However, a simple mobility table with its symmetry of generations cannot account for phenomena such as the significant proportion of members of one generation who remain childless and therefore have no

counterpart in the subsequent generation; differences in the number of children; or the fact that families are socially recognised as meaningful units rather than pure carriers of a specific status. The perspective of attainment processes, while looking at intervening mechanisms, focuses even more explicitly on the present generation, so essentially both approaches take the children's generation as a starting point and follow a "rearward" perspective, tracing back life chances to conditions of social "origin", the status of the preceding generation.

In some deliberate contrast to these approaches, part of the analytical programme of life-course research has been to grasp a better, much more detailed account of the mediating processes between social origin and outcomes in the life course with a particular focus on aspects of the *timing* of various life events (Mayer and Huinink, 1990). By definition, the major dimension of life-course development is "prospective", intra-generational mobility – in spite of often retrospectively collected data. Nevertheless, research has often taken information of social "background" into account (for origin effects on career mobility, see Henz, 1996, Hillmert, 2011, and Manzoni *et al.*, 2014). Other typical features of life-course research include a precise definition of birth cohort samples, an awareness of the gender-specificity and contingency of life courses – e.g., the (in)stability of employment in an occupation which in turn is the basis for a measurement of mobility – and the interest in a variety of relevant institutions and organisations (families, schools, firms). Empirical research has highlighted many aspects in real life courses that may call into question basic assumptions of the stylised models of mobility and status attainment: families of origin are not necessarily stable; there are separations, stepfamilies and single parents; the timing of educational attainment, labour-market entry etc. varies

considerably; occupational status changes also along the career; etc. While life-course research has been very flexible to include such circumstances, it has always required a conception of “macro-level” structural and historical dimensions, too, when describing typical inequality relations in particular societies. These dimensions include long-term trends in social inequality as well as specific historical situations. Rather than investigating purely micro-level causal relationships, such analyses typically look for aggregate, comparative macro-level descriptions of social collectivities (e.g., cohorts) and a stylised account of the basic mechanisms of social inequality in a society.

On the other hand, particularly status attainment research has a record of investigating the role of the family in generating social inequality, comparing the attainment of siblings and acknowledging that family influence is not limited to its socio-economic status (Jencks *et al.*, 1972; Hauser and Mossel, 1985). Moreover, social selectivity in family structures has been identified as a determinant of the inter-generational transmission of social (dis-)advantage (McLanahan and Percheski, 2008). Finally, in recent years more comprehensive concepts of *social reproduction* have been explored which focus explicitly on the mechanisms of inter-generational social transmission. Such alternative approaches – rooted in traditional concepts of demography and family sociology and in recent years mainly inspired by the work of Mare (1997) and colleagues (but cf. already Geiger, 1951; Duncan, 1966; Matras, 1967; Mayer, 1977 on the importance of assortative mating and selective fertility) – look at intergenerational associations from the perspective of the parental generation and ask about the consequences of parental status and behaviour for the following generation(s). This includes questions of how the parental context originates,

whether there are at all children descending from a particular relationship, how many children and when they are born. Conditional on these preceding processes, there is the still important aspect of the relative social opportunities for these children. In order to adequately describe the path of social status transmission from one generation to the next, partial processes in the process of intergenerational social reproduction can be distinguished (cf. Maralani and Mare, 2005; Hillmert, 2013): in particular, an individual's socially selective partner choice, socially selective fertility, and socially selective status attainment of individuals in the following generation. While the parents of a certain cohort of children represent a broad spectrum of birth cohorts, an analysis from the parental perspective will normally start with a particular cohort of individuals and then look at the social positions of their descendants in the following generations. Processes of social transmission are not restricted to two successive generations. Consequently, an extension of the analysis to more than two generations has been proposed (Mare, 2011; Hillmert, 2012; Pfeffer, 2014).

As most other available data sources, cohort data from the GLHS normally permit only conventional, "rearward" analyses. However, they have the typical benefit of life-course data: rich information that can be used for a joint investigation of inter- and intragenerational developments as well as for an exploration into various mechanisms. I will use the long sequence of birth cohorts in the GLHS for a systematic analysis of long-term trends in intergenerational mobility in (West) Germany before finally returning to conceptual questions: Data from a single GLHS cohort study allows illustrating similarities and differences between "rearward" and "forward" perspectives. Further details concerning data and operationalisation can be found in the appendix.

Social Mobility and Status Attainment in 20th Century Germany

Historical Context

In a macro-level perspective, cohort-specific chances of mobility vary, in particular, with supply- and demand-side factors on the labour market. A description of secular trends on the labour market can therefore provide the basis of a comparative mobility analysis across cohorts. Moreover, specific historical events such as World War II have created additional turbulence in the social structure. Regarding the supply side, the development has been characterized by the baby boom in the 1960s and a long-term increase in female labour-force participation. As most other industrial countries, Germany has experienced a marked educational expansion since the 1950s. By the early 1980s, however, this expansion had slowed down. Educational expansion was more marked among young women than among young men, with women overtaking men in many respects since the 1980s. Overall the distributions of male and female educational attainment have converged (Mayer *et al.*, 2009). Most studies have found a long-term decline in social inequalities in education, but these have remained on a significant level, particularly with regard to higher-level qualifications (Breen *et al.*, 2010). The demand side of the labour market, sensitive to overall economic development, offers opportunities for mobility both in its quantity and its differentiation. Economic development in the post-war period was characterised by significant growth. This period has been followed by various cyclical crises and a greater need for austerity in the public sector since the 1970s. As an indicator of labour-market imbalance, the level of unemployment was rather high in the immediate post-war period, virtually non-existent during the 1960s and then

increased in episodes since the 1970s. There has also been considerable structural occupational change with a long-term reduction of self-employment and small family businesses, particularly in the agricultural sector, and an occupational upgrading.

Given these opportunities, we can expect that individual mobility chances have increased across cohorts, at least in times of economic growth and particularly for women. However, educational expansion does not imply increased opportunities if structural occupational change stagnates and increasing levels of education are required to secure access to the same kind of occupational positions (Boudon, 1974). Social transmission across generations has not disappeared, but mechanisms or "reproduction strategies" (Bourdieu *et al.*, 1973) have further shifted from forms of direct inheritance to social reproduction through education. Under such conditions, "ascriptive" variables like social origin do not necessarily lose importance, but they need to be converted into achievement to become salient.

Previous studies of intergenerational mobility in Germany have been based on a metric of social class categories. They have found a long-term trend towards more openness, though it is controversial whether the increase in upward mobility chances and social fluidity has persisted (Müller and Pollak, 2004 using pooled survey data and the EGP) or whether these opportunities have rather decreased again in more recent cohorts (Mayer and Aisenbrey, 2007 using GLHS data and a newly developed class scheme). These analyses of mobility tables were based upon social class concepts with a limited number of substantially meaningful categories and typical moves between them. In the following analyses with GLHS data that focus on both

attainment and mobility, I use a different approach by looking at relative differences between parents and children in (vertical) occupational status.

General Patterns of Inter-generational Mobility

I first give an aggregate account of developments in employment and intergenerational mobility during the 20th century. The panels of Figure 1 offer a condensed description of a number of significant trends and cohort-specific circumstances in 20th century Germany, indicating proportions of intergenerational mobility by gender, age, historical period and birth cohort. A particularly obvious observation is that labour-market entry has been increasingly delayed since the cohorts born around 1930, indicated by an increasing prominence of the status "not in employment". This category includes heterogeneous activity states such as military service, education, unemployment and family care as the main activity. Major reasons for the long-term trend have been the expansion of education and training and more difficult school-to-work transitions since the 1970s (Hillmert, 2002). In a very special situation, the cohorts born around 1920 were highly affected by World War II until their late 20s with young men being in military service and young women having relatively high rates of employment. (A methodological implication of this situation is that measuring mobility outcomes before age 30 would not be very meaningful.) The labour-market participation of women was particularly low during the 1950s and 1960s and increased again afterwards.

- Figure 1 about here -

In this analysis, intergenerational mobility is measured continuously as the difference between individual and parental occupational status. “Upward mobility” is defined as the situation when individual’s present occupational status is higher than the parental status + 10%; “lateral mobility” denotes a situation when status is equal to parental status +/- 10% (the ‘tolerance region’); and a status lower than the parental status - 10% counts as “downward mobility”. The depicted level of mobility does not change much once the vast majority of the respective cohort has entered the labour market. In a strict sense, these charts do not allow inferring about the individual-level stability of mobility experiences, but additional analyses indicate that mobility rates do in fact decline sharply with individual labour-market experience and age (Kappelhoff and Teckenberg, 1987; Hillmert, 2011; Stawarz, 2013). In these aggregate descriptions, long-term developments in intergenerational social mobility are not immediately obvious. They can be more easily seen in the following analysis that is restricted to cohort members who are in employment.

Group-Specific Mobility

Group-specific mobility is particularly relevant for assessing social inequality in society. The following analyses make use of a group classification based on quartiles of parental status: the top 25% category, the intermediate category containing around half of the cohort members, and the bottom 25% category. The categories were calculated separately for the cohorts to account for structural change. It is obvious that the opportunities for upward mobility may be limited (though not excluded) for the top group (“ceiling effects”) while the risks of downward mobility may be limited for the bottom group (“bottom effects”). Most interesting is therefore the situation of the majority in the intermediate social strata. From the previous analysis it is also known

that opportunities for careers until age 30 were highly cohort-specific, exemplified most prominently by the delays of 1919/21 birth cohort. However, an age-standardised definition allows a comparison between all cohorts.

In Figure 2, group-specific mobility chances are compared across cohorts. Panel 1 indicates that young men from families with lower or intermediate status experienced increasing opportunities for upward mobility in the cohorts born between around 1930 and the mid-1950s (i.e., until the 1980s in a period perspective). In the younger cohorts that were often confronted with a difficult labour-market situation these advantages have slightly declined again. Among women, the long-term increase was even more significant, and mobility rates have remained high, at least for the majority in the intermediate group. The top group has had consistently low rates for (further) advancement among both men and women, but again the decline in the younger cohorts is more obvious for men. According to Figure 2, panel 2 the risks of downward mobility were more stable across cohorts with young women experiencing rather a long-term decrease in the cohorts born between around 1930 and 1955. The mobility levels of men and women have converged. The most recent cohorts were obviously faced with an increase in this risk, particularly in the case of young men.

- Figure 2 about here -

Stages of Individual Status Attainment

In a perspective of status attainment I now focus on the relative importance of social origin and education (and career entry) for occupational attainment. The following measures are derived from regression-based path models with occupational prestige

at age 30 as the final dependent variable and social origin, education and first occupational status as predictors. Individual education is measured in years and in the form of vocational or academic training and social origin is measured by both mother's and father's education and the maximum of both parents' occupational status. A comparison of explanatory power among the stepwise applied models allows assessing the relative contribution of the various predictors (see Figure 3, panel 1). The decomposition of variance bases upon the R^2 in the respective OLS regression models. Further information on the stepwise models is provided online.

Comparing across cohorts, there is – except for the youngest birth cohort – not a long-term decrease in the degree of overall determination, but rather an inversely U-shaped pattern. Education and first occupational status – as an indicator of the role of career entry – prove to have a significant, separate relevance for predicting occupational status at a later career stage. However, it also becomes obvious that the contributions of the various determinants are closely intertwined with each other. In particular, social origin has hardly any specific explanatory power in the cohorts born after 1951. This means that families are obviously no longer able to "correct" occupational placement beyond what was possible through education and at first positioning in the labour market. This is partly a result of change in the occupational structure such as a decreasing proportion of farmers and artisans, who have typical patterns of succession and direct status inheritance. Most prominent in this analysis is the combined explanatory potential of the three determinants. In other words, social origin may still be an important determinant of occupational positioning, but it normally needs to be transmitted through educational attainment and/or first occupational placement. A further decomposition of the "joint" explanatory

component (available online) reveals that mainly education in combination with first positioning and the full combination of origin, education and first job account for this component. In summary, education turns out to be the most relevant determinant of occupational positioning. It has both significant original explanatory potential and a prominent share in conjunction with the other determinants; with respect to the level of determination, however, it is still a necessary rather than a sufficient condition for a successful attainment of higher-level positions. The considerable contribution of the first occupational position implies that status differences in early careers are relatively stable.

The analyses now focus on educational attainment as the central preceding biographical stage. They look at the inter-generational associations of education (see Figure 3, panel 2). Once again comparing predictive power across cohorts, there is another inversely U-shaped development. The educational levels of parents and children were obviously most closely linked in the cohorts born around 1930. For the cohorts born earlier or later, smaller associations can be found, but there is no secular trend of diminishing association across cohorts. Exceptional is the drop for men of the 1954/56 birth cohort. As parental education is only part of “social origin”, the relevance of parental occupational status (net of any associations with parental education) is also displayed. A further decomposition distinguishes analytically between the contributions of mothers’ and fathers’ education. In the oldest cohorts, most of the variance in children’s education was explained exclusively by fathers’ education – not least because there was little variation in mothers’ levels of education. This exclusive part has been clearly reduced. Relatively even more important has become the joint explanatory potential of mothers’ and fathers’

education. This part accounts for up to 50 percent of the variance explained by parental education altogether, as in the case of men born around 1960. Joint explanation means that fathers' and mothers' levels of education are typically associated so that their contribution cannot be clearly separated. This finding is another argument for considering origin context formation (in the form of assortative mating) in analyses of intergenerational social reproduction.

- Figure 3 about here -

An Empirical Illustration of the Analytical Concepts

Only a small part of the GLHS data allow conducting empirical analyses in both a "rearward" and "forward" perspective of intergenerational social transmission. Figure 4 gives an illustration of different concepts with data of the birth cohorts 1919/21. In this study, relevant information was collected about the respondents, their parents and their children. In spite of conceptual and empirical differences, a parallel illustration reveals many similarities between the two perspectives. In combination, the analyses can also be regarded as specific comparisons among three generations – or, more precisely, as two pairwise comparisons – with the sample of the 1919/21 cohort members representing the middle generation. In the charts on the left, mobility status and attainment refer to the cohort members while in the charts on the right they refer to the children of the cohort members.

Panel (1) in Figure 4 gives an impression of the variation in the temporal distance between generations and the extension of social mobility and reproduction processes across three generations. Generations are separated, on average, by approximately

30 years. This also means that “rearward” and “forward” analyses starting from the same cohort will extend into very different historical contexts. The oldest parent of a cohort member was born in 1852, the last child was born in 1974. While the respondents themselves were sampled within a narrow range of birth cohorts, both their parents and their children have considerable variation in their years of birth. This typical situation makes it generally difficult to locate distributions of origin positions as well as processes of inter-generational mobility and reproduction precisely in historical time (see also Duncan, 1966). Below panel (1) accompanying information about fertility is listed. The significant differences between men and women are due to a surplus of women in the post-World War II period as a result of war-related casualties. Fertility indicators and panel (2) make obvious the most important difference between the two analytical perspectives: Only a “forward” perspective is able to specify the proportion of cohort members who actually contribute to intergenerational reproduction, the number of children and therefore the absolute rates of inter-generational reproduction. Such a perspective opens many additional opportunities for inequality research as it allows studying processes of partner choice and fertility without conditioning on the successful formation of a family (cf. Hillmert, 2013). In the remaining analyses, however, I will concentrate on the considerable similarities between the two perspectives.

Turning towards issues of attainment and applying analyses analogous to the previous section, panel (3) reveals that the determination of occupational status by education and social origin has been even stronger for the children of the cohort members than for the cohort members themselves. The respective OLS regression models predict occupational attainment at age 30 by individual education and social

origin. The analysis confirms that individual education has become the dominant factor: Social background has remained salient, but only in its association with education. There is obviously no longer an independent path of “pure” origin effects. Panel (4) traces educational attainment (in years) back to parents’ education (in years) using again a variance decomposition on the basis of OLS regressions. Mothers’ education has obviously become relatively more important for the children of the respective cohort members. The large proportion of a “joint” explanatory potential of both parents is an indicator for the relevance of partnership formation and assortative mating. Finally, the analyses of panel (5) focus on the relevance of families as social units at different stages of the attainment process. They decompose the observed variation in educational attainment and occupational status – as measured in the analyses of panel (3) and (4) – into three components: variation within families, variation between families that can be associated with the classic measures of social origin (parents’ education and occupational status), and variation between families that is not related to these measures. Within families, this socio-economic status (SES) is constant by definition. Such an analysis is often not applicable in “rearward” analyses when only one child per family was sampled in the study and family information is limited to parental status. However, available information about siblings in data like the GLHS enables to perform again parallel analyses. For the children of the cohort members, the proportion of variation within families has been smaller, particularly with regard to education, while the relative explanatory power of social origin has obviously increased rather than decreased across the generations.

- Figure 4 about here -

Conclusions and Outlook

This paper has described selected trends in social mobility and reproduction in (West) Germany during the 20th century. Analyses have found changing opportunities across cohorts not only with respect to the overall extent of mobility but also regarding the relative importance of relevant mechanisms. Concerning the level of social mobility, there has been neither absolute stability nor steadily increasing openness in the occupation-based structure of inequality. Rather, a trend towards more openness has obviously slowed down (among young women) or even reversed (among young men) for the cohorts born after the mid-1950s. Though basing upon a rather specific definition of mobility, these results are compatible with previous analyses based on categorical class mobility tables. Cohorts also differ in the biographical timing when the impact of inter-generational mobility unfolds. There have been both a long-term trend of later positioning in the labour market due to educational expansion and extended transitions and career delays due to specific historical circumstances as in the case of the 1919/21 cohort. Concerning mechanisms, social mobility and reproduction can be regarded as extended, stepwise processes that are structured by families, education and employment. The formation of the specific origin context (family composition) is a decisive step in social reproduction which typically precedes the attainment (and even the birth) of an individual by many years. Partner choice has already long-term consequences for (potential) descendants' life chances as the resources of *both* parents are important determinants of their children's education. The role of the family as a mediator of social reproduction has rather increased by the fact that the variation in attainment

within families has obviously become relatively smaller. Education has once again proved to be the decisive mechanism of status attainment and social reproduction. The effects of the origin contexts work primarily sequentially through education. While direct origin effects on occupational attainment have largely disappeared, education is still significantly influenced by social origin, though to a lesser extent than in the mid-20th century. Education is also the key determinant of positioning in the employment system, and job entry heavily influences further careers which are in turn important for individual life chances. There has also been increasing similarity in the mobility experiences of men and women across cohorts, but significant differences have remained with regard to labour market participation.

The general analytical conclusion of this paper is that social mobility research is enriched by taking the life course more fully into consideration, in particular with regard to the timing of life events, intra-generational change and the variety of relevant mechanisms and institutions. The paper has also hinted at analytical benefits from an extension of classic conceptions of social mobility towards a concept of social reproduction which analyses both the formation of social contexts (in particular, family contexts) and the inter-generational effects of these contexts. In practice, however, such a perspective is often restricted by data constraints. On the other hand, life-course research – which is often rather detailed in micro-level analyses – can benefit from the more "conventional", highly aggregated perspective of social mobility, especially when it is concerned with the description of encompassing long-term trends of social inequality. How sophisticated they may be, micro-level analyses alone are not substitutes for adequate macro-level descriptions of the dynamics of social inequality which compare fundamental structures of

inequality across time. Changing “structures of opportunity” and their consequences need to be identified at both the micro and the macro level, and they can be located in various time dimensions, of which successive cohorts are probably the most obvious. Finally, a conclusion in practical terms is that a focus on social reproduction in the sense of status transmission to the following generation implies some shifts in the typical design of data collection. Most important would be information about a sample of relatively older persons (potential parents) and their children’s life courses rather than samples of comparatively young persons and their parents as in most conventional studies. An alternative for many applications would be to collect more detailed data about the life courses of siblings.

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Appendix

Analyses in this paper have been restricted to West Germany as only these data allow long-term historical comparisons. A previous study (Mayer and Solga, 1994) has revealed that mobility patterns were not dramatically different in the former FRG and the former GDR, though there have been considerable cohort differences. Moreover, the samples in the older parts of the GLHS were restricted to native Germans. For reasons of consistency, in all cohorts only cases with German nationality have been included in the analysis. Today about one fifth of the German population has a migration background (up to the 3rd generation), in West Germany and among younger age groups the proportions are higher (StatBL, 2013); about half of the migrants hold German citizenship. Immigrants are overrepresented in the lower social strata. Educational research has shown that migrants tend to have high educational aspirations but comparatively low attainment. However, much of this disadvantage can be explained by "classic" variables of stratification such as social class position (Kalter and Granato, 2002, so that analyses controlling for social origin may be affected only to a minor extent. It should also be acknowledged that two major forms of immigration are in fact represented in the data: large flows of refugees after World War II that were integrated into the German society, and migration from East Germany, especially after the collapse of Communism in 1989.

The main variable of interest is social status in the form of occupational status as a metric variable. It is represented by occupational prestige measured according to the SIOPS scale (Treiman, 1977), a measure which is available for the respondents in all cohorts including their parents and, if applicable, children. In the analyses of status attainment, social origin is measured as a combination of father's education, mother's

education and the maximum occupational status of both parents. In most cases, this is equal to father's occupational status. In the surveys, respondents were asked to report their parent's occupation at the time when the respondent was 15 (regarding the father) or up to 16 years old (regarding the mother).

Education is measured as years of education using an ideal-typical reconstruction on the basis of final educational attainment. As a metric variable, years of education are convenient for a decomposition of variance in educational attainment. However, given the importance of formal qualifications in Germany, this measure may not adequately represent social inequality when used as dependent variable and, in particular, consequences of education is an independent variable. Therefore, an additional indicator for vocational/academic training (and the interaction with years in education) is included when education is used as an independent variable.

The data on the cohorts born around 1920 may be subject to considerable survival bias, particularly among men. Respondents were already approximately 65 years old at the time of the interview. Even more important is the fact that these cohorts were severely hit by casualties during World War II, especially in military service (Brückner and Mayer, 1987).

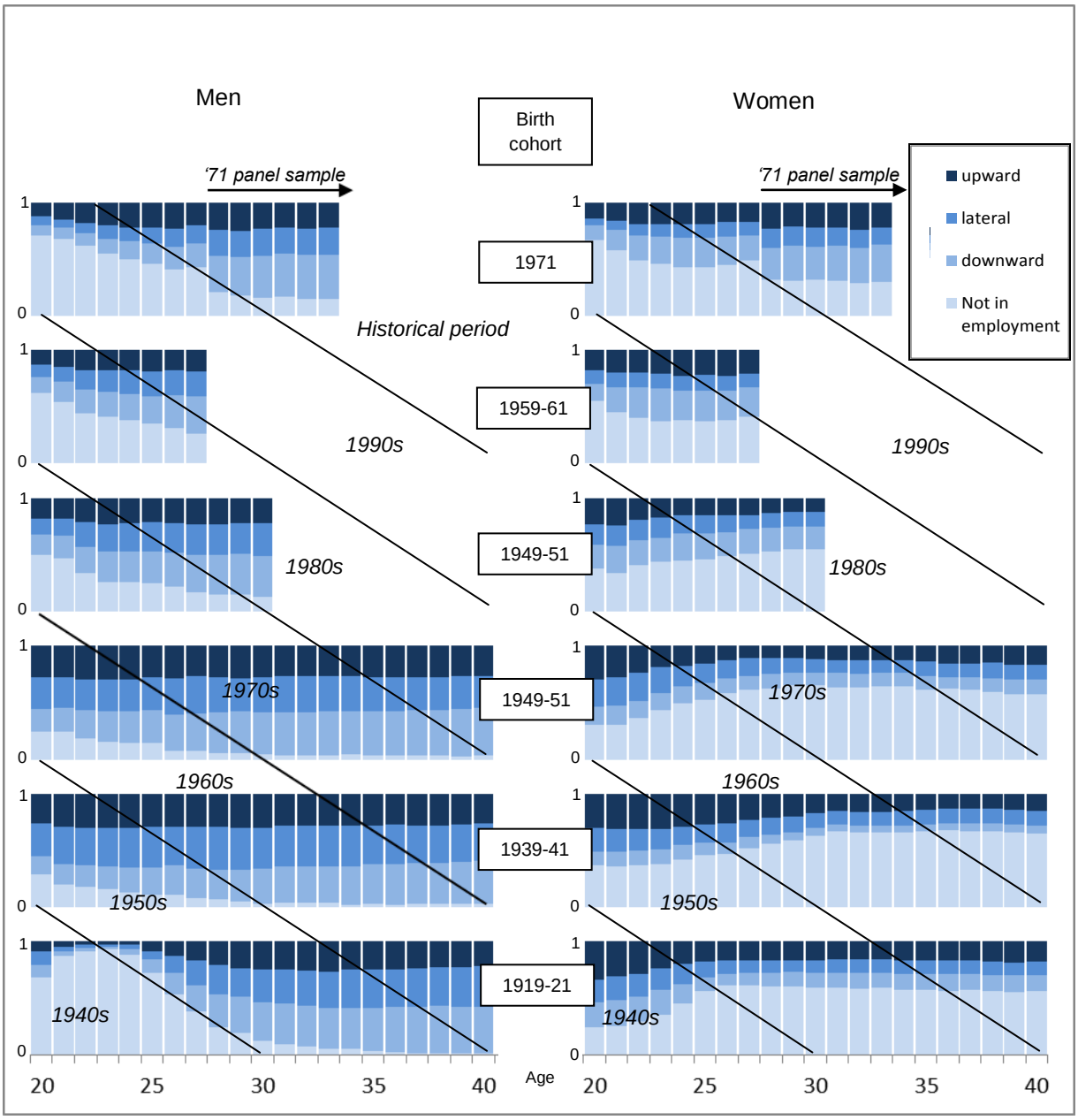


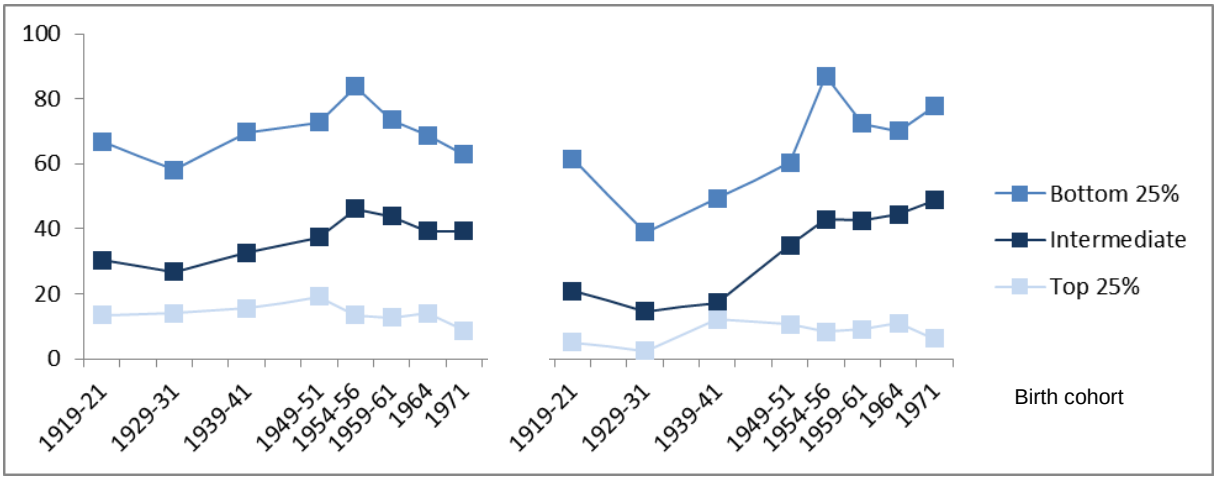
Figure 1: *Intergenerational mobility by gender, age, historical period and birth cohort (proportions)*

Upward / lateral / downward mobility: Own present occupational status is higher than parental status + 10% / equal to parental status +/- 10% / lower than parental status - 10%. The diagonal lines indicate approximately equal points in historical time.

Basis: GLHS, various birth cohorts, own calculations

(1) Opportunities for upward mobility (percentages), by origin status group

Men Women



(2) Risks of downward mobility (percentages), by origin status group

Men Women

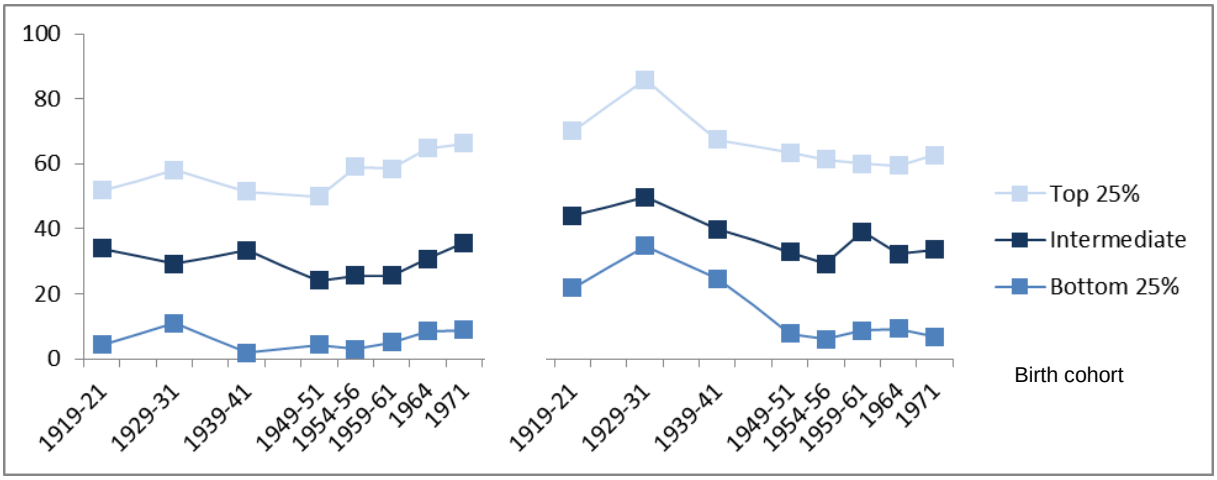


Figure 2: *Group-specific intergenerational mobility*

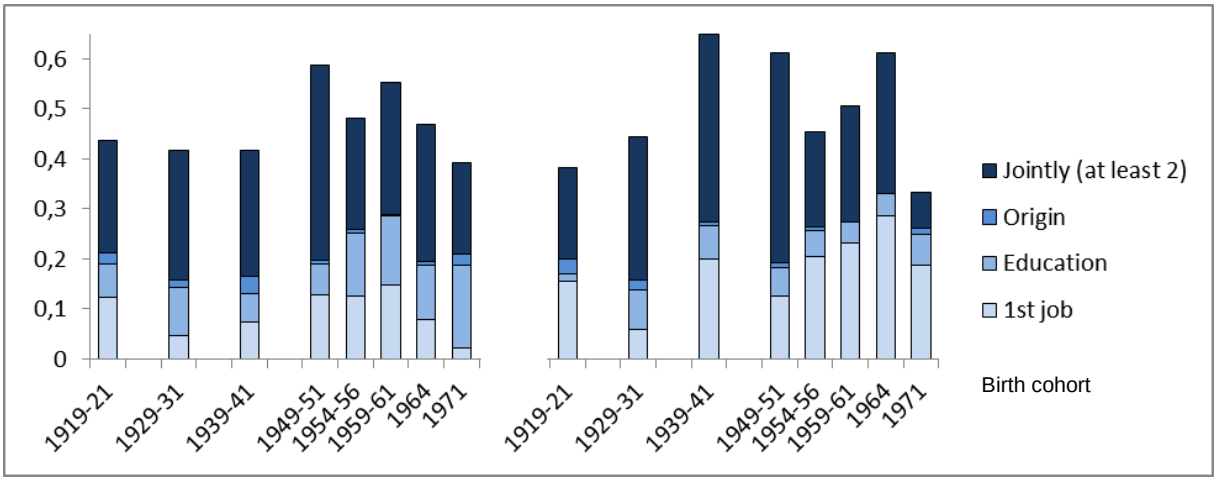
Upward / downward mobility: Own occupational status (at age 30)[1] is higher than parental status + 10% / lower than parental status - 10%.

Basis: GLHS, various birth cohorts, own calculations

[1] If not available at age 30, at last job. This is relevant particularly for the 1959/61 cohort that was interviewed at a young age.

(1) Variance components of occupational status at age 30

Men Women



(2) Variance components of educational attainment (years)

Men Women

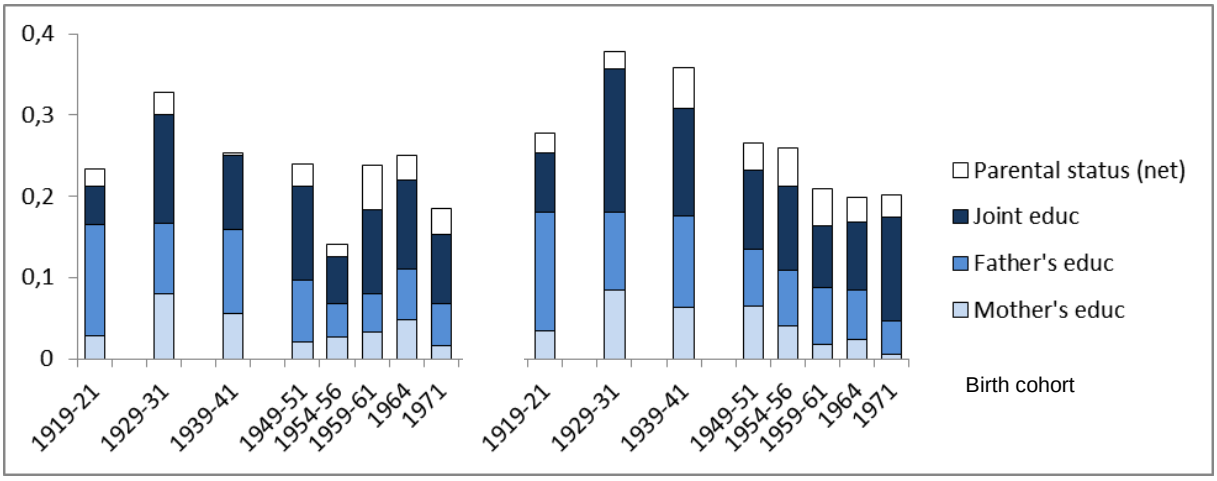
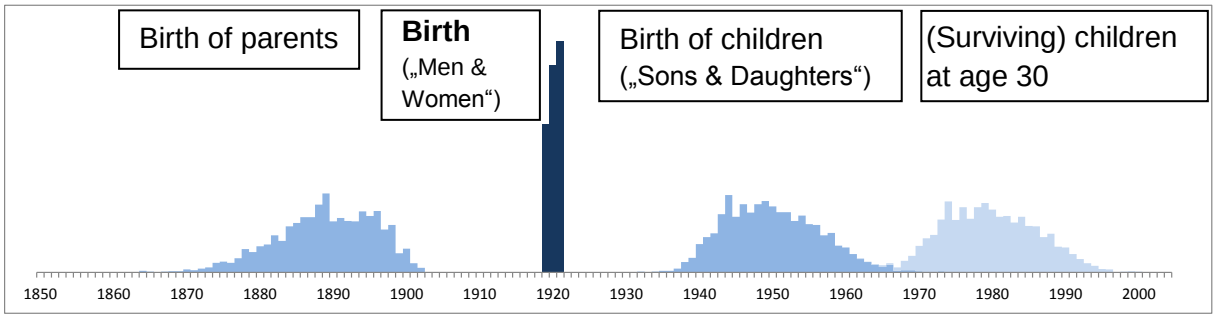


Figure 3: *Variance decompositions (proportions)*

Basis: GLHS, various birth cohorts, own calculations

(1) Historical order and frequency of events[2]



„Rearward“ perspective

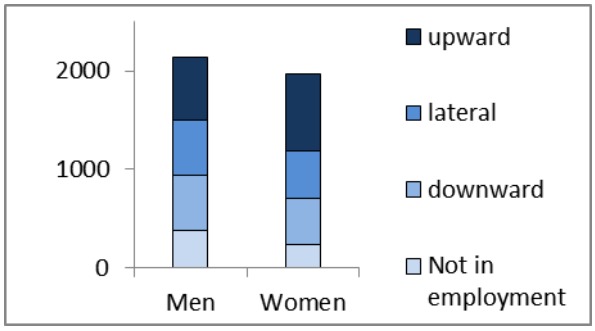
„Forward“ perspective

Fertility information

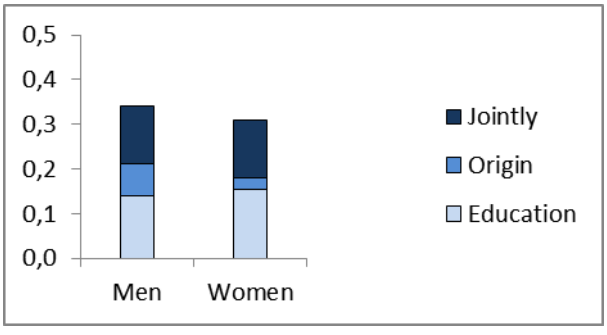
Childless (= no reproduction):	n/a	14.2 % (women) / 8.1 % (men)
Avg. no. of children:	n/a	1.97 (women) / 2.14 (men)
Avg. (conditional) family size:	3.86	2.30 (women) / 2.32 (men)

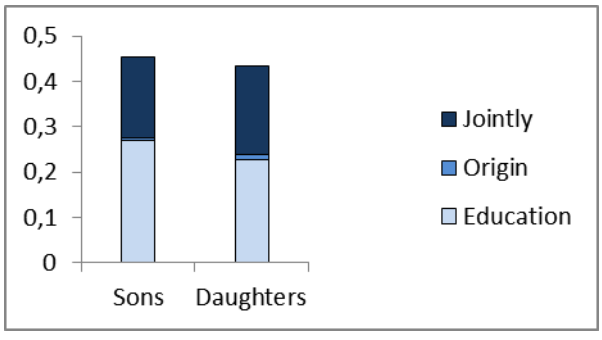
(2) No. of descendants (per 1.000) and their intergenerational mobility status[3]

n/a



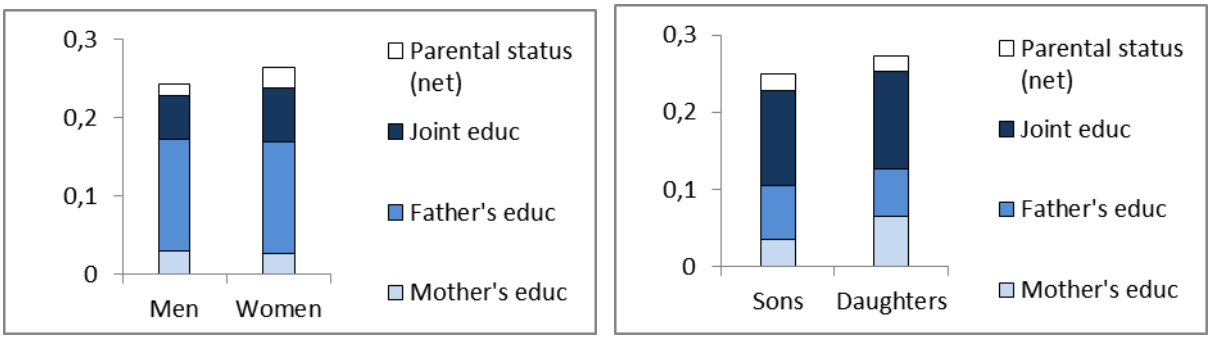
(3) Variance components of occupational status (at age 30)[4]





[2] Estimates for 1986 and later years.
[3] …compared to cohort member's individual status at age 45.
[4] …for children: "predominantly held" occupational position.

(4) Variance components of educational attainment (years)



(5) Variation within and between families at different stages of the attainment process

…using siblings data:

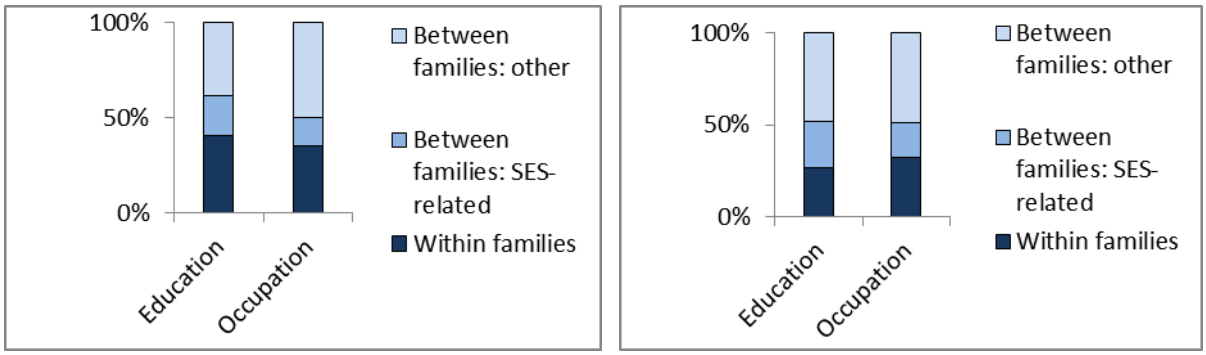


Figure 4: *"Rearward" and "forward" perspectives of intergenerational social mobility and reproduction*

Basis: GLHS, 1919/21 birth cohorts, own calculations