Johannes Kopp and Nico Richter

Social Mechanisms and Empirical Research in the Field of Sociology of the Family: The Case of Separation and Divorce

Abstract: During the last decades, social mechanisms have been broadly discussed in general sociology, but, in family sociology, they seem to be non-existent. Therefore, the first aim of this paper is to show that, although the term can hardly be found, prominent theoretical ideas use more or less explicitly mechanistic explanations. Focusing on the determinants of separation can show that all arguments connect (structural) input with (social) outcome and search for theoretical explanations in the sense of social mechanisms. We will demonstrate how macro-structural traits are mechanistically connected with individual variables and how they lead to a stable or fragile partnership. As often mentioned, “mechanism-based storytelling” (Hedström/Ylikoski 2010, 64) should be accompanied by empirical research. Therefore, in a simple statistical model in the second part, we will show the results of our testing of some examples of well-known variables for the explanation of separations. It will show how correlations can be mechanistically explained and not simply statistically described.

1. Introduction: Social Mechanisms and Sociological Theory

One of the most important aspects in the discourse on theoretical sociology during the last two decades concerns the role of social mechanisms for sociological explanations (Hedström/Sweelberg 1998a; Bunge 2004; Opp 2005; Hedström 2005; Hedström/Bearman 2009a; Hedström/Ylikoski 2010). Although sociology is far from being unified about its theoretical basics or fundamental methodology and is sometimes also at odds over the aim of sociological research in general, most articles are concerned with the explanation of broader social phenomena. This is exactly the defining term of analytical sociology: “Analytical sociology is concerned first and foremost with explaining important social facts [. . .]. It explains such facts not merely by relating them to other social facts—an exercise that does not provide an explanation—but by detailing in clear and precise ways the mechanisms through which the social facts under consideration are brought about.” (Hedström/Bearman 2009b, 3f.) Emile Durkheim and Max Weber stated the main task of sociology lies in understanding social processes and thereby explaining social facts such as the differences in suicide rates or varying economic
trajectories. Mechanisms play a special role in this task because they are “crucial in the causal reconstruction of social macro-phenomena” (Mayntz 2004, 238).

These assumptions are the common ground for analytical sociology (Hedström/Bearman 2009b). But even if these fundamental statements are shared, not everything is clear: then how are social mechanisms to be defined (Hedström/Bearman 2009b, 4ff; Hedström/Ylikoski 2010, 59f.; Mahoney 2001)? Can and should social mechanisms be understood as a part of methodological individualisms (Udehn 2001; Mauer 2006; Hedström/Ylikoski 2010, 59f.)? Is there any difference between rational-choice-based modeling and the use of social mechanisms (Opp 2005; Hedström/Ylikoski 2010, 560f.)?

It is not necessary to give a detailed presentation of all varying discourses on this subject. Not being deeply involved in all aspects of the discourse and taking an outside perspective makes things seem clear and easy. The aim of sociology is to explain social phenomena. Explaining those correlations, making sense of them, means to bring light into the black box of a correlation (Boudon 1998, 172; Mayntz 2004, 238; Esser 1996). Thus explaining social phenomena means, in fact, reconstructing them in the sense of causal coherences. If a social phenomenon or a social process is explained, it is also understood in the form of a theoretical base that leads to an understanding not only of that, but also of how the explanation variables impact the social facts being dealt with. A “clear causal chain” is needed; “the causal process has to be spelled out” for an explanation (Mayntz 2004, 241). In summary, the search for social mechanisms is or should be exactly that causal link.

Using the scheme by Hempel and Oppenheim or the covering-law approach (Hempel/Oppenheim 1948) is not sufficient if the connecting law is again a black box. Of course, there is no clear cutting-off point whether there is enough light in the box. Every explanation can again be challenged. Sociologists are usually satisfied if they see reasonable—e.g., theoretically sound—causes and motives in human behavior to illustrate why people act the way they do. Of course, it can be questioned to what extent such theoretical mechanisms are based on psychological or even biological processes, but normally this is not the purpose. Nevertheless, it is essential to clarify the social mechanisms we assume at every single point of a sociological explanation. Social mechanisms can be found at all levels during this process of a reasonable understanding of social phenomena. With reference to one of the first papers in this research tradition, Hedström and Swedberg (1998b), three types of social mechanisms can be differentiated: situational mechanisms, action-formation mechanisms, and transformational mechanisms. It becomes evident why we assume that the lack of mechanistic explanations in the sociology of the family may simply be a misapplication because that concept is well known in this field, namely, in the form of the so-called methodological individualism (e.g. Boudon 1980; Coleman 1990; Lindenberg 1990; Esser 1999a; 1999b), which is merely common sense in family sociology (Hill/Kopp 2015).

The first type of social mechanisms connects the social realm with the individual or rather a prototypical actor. The question is which are the relevant (macro-)features of the situation and how do they influence decisions? This
seems to be one of the most interesting points of a mechanistic explanation because it makes clear that every kind of action begins with an individual, subjective definition of the situation (Esser 1999b). Compared to that, the action formation mechanisms are virtually negligible (Lindenberg/Wippler 1987; Popper 1961). In sociological research, these mechanisms do not form the main focus anymore; they are now only instruments because there is wide consensus on possible action theories (Hill/Kopp 2015). Therefore not too much time should be invested in choosing between the different theories such as rational choice or a combination of desires, beliefs, and opportunities (Hedström 2005, 38ff.). Instead, it is true for all action theories that to postulate their operation does not explicitly name the underlying mechanisms. Thus, attention should not be paid to choice but to the mechanistic explanation of the action formation theory. The third task for sociology lies in researching transformation processes: the different processes demonstrating how individual decisions or actions are transformed into a collective phenomenon (see Oliver/Marwell/Teixeira 1985). The polymorphism of the term social mechanism does not facilitate the discourse; it is used for a situational analysis of opportunities and social production functions (see Ormel et al. 1999) but also for different types of action theories and, last but not least, for different aggregation processes such as hierarchies and markets, simple exchange and path dependencies or output structures such as the famous prisoner's dilemma. Nevertheless, it is clear what we want to show in this paper: mechanistic explanations are not really missing in the field of family research but are often too implicit. Discourse in the past decades has shown that, beyond the sketched debates, social mechanisms emphasize the fact that sociology is interested in understanding the social world and that theoretically clear causal chains are thus necessary, ones which also involve the micro-level and are committed to a structural individualism (Hedström/Bearman 2009b, 4).

But empirical research is indispensable to prove the power of mechanistic explanations. We therefore turn to family sociology and the research on relationship stability. In this research tradition (for an overview, see Arranz Becker 2015) much theoretical and empirical work exists, although the term 'social mechanism' can hardly be found. In the next section we will first discuss the main theoretical arguments in family sociology to afterwards connect these traditions with analytical sociology and the idea of social mechanisms. Finally we will test empirically these deduced mechanisms.¹

2. Mechanisms and the Theoretical Discussion in Family Sociology

As mentioned above, the debate about social mechanisms is familiar in general sociology. Elster (1989) shows a simple definition of what the term 'social mechanism' means: "A mechanism explains by opening up a black box and showing the cogs and wheels of the internal machinery [and] provides a continuous and

¹ Here we also follow the ideas of Sørensen 1998 that empirical research should follow theoretical ideas and not technical innovations.
contiguous chain of causal or intentional links between the explanans and the explanandum." (25)

Research and theoretical discussion about the family does not even use the term ‘social mechanism’ and, for the most part, the essential discussion about it is much too vague. Family sociology followed the theoretical debate in general sociology for a long time and looked for different functions of the family or tried to explain behavior within the family such as the division of housework by different socialization processes and thus different values and roles (Klein/White 1996). Starting in the 1960s, the theoretical discourse about the family and familial behavior changed dramatically. Starting with the work of Homans (1961) and Thibaut and Kelley (1959) and also the different traditions which incorporate economic thinking in sociological explanations (Schultz 1974; Becker 1976; 1981), an explanatory and analytical view became dominant. Together with the broad development of empirical research methods and the availability of a quantity of usable data sets in this field most articles are not only analytical but also empirical. All newer developments such as a life-course perspective or the obvious necessary empowerment of a gender perspective can be integrated in this field (Bengtson/Allen 1993).

But is nearly all work on social mechanisms really ignored in family research? Maybe the answer is simple: even if the phrases of analytical sociology and social mechanisms are rarely found in family sociology, the ideas are used broadly. The core of social mechanisms in analytical sociology can be described by the commitment to a structural individualistic program. The social mechanisms approach tries to understand social processes by explaining the causal relations with the help of situational, action-formation and transformation mechanisms (Hedström/Swedberg 1998b, 22). In family research different forms of explanatory approaches can be differentiated: the exchange theory and the economic approach to the family. Nowadays the common ground is more accentuated than the differences (Klein/White 1996; Hill/Kopp 2015). A brief look into the common argumentation in the specified field would help illustrate the implicitness of the postulated mechanisms.

The exchange approach focuses on the direct interaction of two people, mainly between a man and a woman, and their endowment through their social position. What makes a partnership more attractive than a single living arrangement is the possibility of resource pooling. The well-known economy of scale can also be called a mechanism (Klein 2015). The validity of that assumption is so common or even natural that it seems unnecessary to elaborate on the statement in a proper analytical way by searching for the mechanistic processes working here. The same applies to the complex interplay between the relationship quality, the satisfaction with the partnership and the evaluation of potential alternatives (Thibaut/Kelley 1959). Of course, the classical exchange theory proposed by Homans (1961) gives an intuitive idea of the causal processes between the result of a social interaction and the probability of its reoccurrence or the psychological

\footnote{Cf. Mayntz 2004; for a conclusion of other potential definitions, see Hedström/Bearman 2009b, iff.}

\footnote{The article by Åberg 2009 seems to be the only exception. Here the concept of social mechanisms is used to explain the contagion effect in divorce behavior.}
consequences of ineffective interactions. In the form represented by Coleman (1990), the approach using the exchange theory can also causally explain price and power differences. Furthermore, one of the first aggregation mechanisms is discussed when Thibaut and Kelly (1959, 24ff.) apply the ideas of the game theory to marital interaction called the battle of the sexes.

Although the economic approach to human behavior is part of a scientific field which enhances the role of individual behavior and exchange, all the ideas first proposed in general by Becker (1976) and as an application of the general ideas to the field of the family by Becker (1981) are nearer to the core of sociology than intended. The fundamental approach arises from the idea that individuals are no longer only consumers of given products, but producers of their personal well-being (Becker 1976). People use market goods, their own capabilities and, of course, time to generate the commodities which directly produce utility and satisfaction. Through this change in perspective, the composition of the producing unit—put simply: the structure of the family—and also work (not only on the market but also at home) become crucial. The institutional characteristics of the family, the historical path dependency of decisions and investment are theoretical aspects which are important in this research tradition. Time patterns, human capital, and exchange processes as well as production functions become important in this field (Becker 1981, 7ff.). Important social mechanisms such as matching processes or differences in social production function because varieties in human capital are postulated, of course, but rarely explained. The role of specific investments is also obvious theoretically. If the evaluation depends on the specific character of both people and their special history, a kind of path dependency emerges which can help to explain the resilience to change.

A far broader and deeper presentation is needed to spell out each connection between the two main theoretical approaches in family sociology and the social mechanisms idea in analytical sociology. At this point it is clear that there is no contradiction between the research agendas; they should rather be seen as complementary. Although the term ‘social mechanisms’ is not used, the ideas are the same: all concepts concentrate on the structural or, perhaps, rather on the sociological influence of opportunities and institutional arrangements on individuals. Similar actions may produce different outputs depending on the history and aggregation rules. Thus, although not mentioned in family sociology, in practice the macro-micro-macro-model and the ideas of social mechanisms are ubiquitous. The main challenge is to make research more concrete and move away from general theoretical ideas to a concrete mechanistic explanation for a research problem.4

4 In such a broader treatise it could also be shown that all considerations concerning the ecology of human behavior (see Bronfenbrenner 1979) or the path dependency of social life through a life course perspective (Aldous 1990; White 2013) can theoretically be easily integrated in a combination of the different approaches, which also includes the idea of social mechanisms (for some first ideas, see Hill/Koppen 2015).

To prevent this paper from suffering the fate of being another part of “lazy mechanism-based storytelling” (Hedström/Ylikoski 2010, 64), a concrete research agenda has to be followed. Research on the (in-)stability of close romantic relationships has a long tradition in family sociology. Using the example of the U.S., where every second marriage will be dissolved, no one can deny the importance of relationship stability for family research. Incidentally, the divorce rate for Germany is lower, but even here the—difficult to calculate—proportion of divorced couples of a specific marriage cohort will be above 30 percent (Arránz Becker 2015). Although divorce already appears to be a momentous occurrence, we want to open the perspectives a bit wider and examine not only married couples but also close intimate relationships in general. This is related to two developments: first, a chronologically broader process of the institutionalization of relationships and, second, the diversification of living arrangements.

Over a long period in history, the different steps of the institutionalization of a close relationship have become synchronized. This means that, in the past, all significant steps toward a solidification of a union are grouped around one single event: the marriage. In the last decades this process has changed dramatically (see Kopp et al. 2010): the acquaintance process, the start of intimate behavior, the foundation of a mutual household, the marriage itself, and the birth of the first child can be observed during a long time span of the partnership and—what is the more interesting fact—may occur independently of one another. These factors indicate that it is now no longer sufficient to study only divorces, although marriages are still a very important living arrangement. The process of separation makes this argument even stronger. First, marriages end, of course, before they are divorced, and often a long phase of separation precedes the divorce. Furthermore, it can be ascertained that a divorce is nothing more than a special case of a separation with a substantially higher barrier against the dissolution compared to non-marital partnerships. If these facts are considered, separation and divorce are not two different occurrences but only two cases of the same process. Thus from a theoretical perspective, the same arguments should be valid for all kinds of separations, and it is reasonable to focus on separations in general and not only on divorces (see also Bumpass/Raley 2007).

Closely linked to that point, the second trend mentioned should be briefly stated. Social mechanisms leading to separation instead of divorce make it easier to include research from different areas and also about different living arrangements besides marriage, especially for younger birth cohorts. In Europe different living arrangements exist, and normatively there is an adjustment and equivalency between different forms. Naturally, many regional differences exist, and it is impossible here to explore them in detail and to discuss why northern and eastern Europe form one side of the continuum with a kaleidoscope of living arrangements, a high rate of out-of-wedlock births as well as a historically high divorce rate. In contrast, countries like Portugal, Spain, and Greece are the other extreme (Glorius 2015; Schneider 2015). Even in Germany there are still
obvious differences between the eastern and western states, and there are broad ideas about possible cultural and historical mechanisms, for instance, which are illuminating in this respect (Klüsner 2010; Kreyenfeld/Konietzka 2015; Pollack 2002; Pollack/Pickel 2003). For the present question, it is necessary only to realize that a perspective on separations in general instead of divorce may lead to the consideration of mechanisms which can be used independently of specific contextual settings. The relevant question at this point is to explain the dissolution of a partnership. Many research studies mention different social characteristics which correlate with separation. Just to convey a few impressions from this discourse, the probability of separation is higher for couples living together in a non-marital union (regardless of whether married later), in partnerships with a short phase of dating or an early pregnancy. Also the age at marriage or at the beginning of the partnership and the age difference between men and women influence the stability of the relationship. Mutual children, apartment, house, and interests stabilize the union. Catholic and religious people have more stable partnerships. Also the employment status of both partners, their educational, absolutely but also relatively, and their familial background are important correlates of partnership stability. Sometimes the effects are different for men and women; for example, the male’s having full-time employment stabilizes the relationship; female employment rates correlate positively with instability and divorce (see especially South/Spitze 1986; White 1990; Diekmann/Klein 1991; Wagner/Weiss 2003; 2006, Arranz Becker 2015). Earlier relevant research, the critique of so-called variable sociology (Esser 1996) becomes graphic: in all the cases listed above, authors use empirical coherences to explain social phenomena, but, in fact, the underlying processes are not or, at least, not explicitly pointed out, so that, in a narrow sense, from an analytical point of view, there still is no clear explanation. It is, for example, not a sufficient or satisfactory sociological explanation to ascertain that early pregnancies and teenage motherhood have negative effects on union stability but that the number of children can be seen as a union-specific investment which stabilizes the partnership. What is again needed is a causal connection or a social mechanism.

As mentioned above, the term social mechanism is not used in family sociology. But it was also made clear that the logic of mechanistic explanations and analytical sociology has been adhered to for a long time. In the following, we will show paradigmatically how some of the correlates mentioned are incorporated into a causal explanation with the help of an approach using exchange theory as well as an economic approach to the family. To show the complexity of our chosen topic, we point out the process model shown by Arranz Becker (2015) in Figure 1. In that model, the intention of the author is twofold. First, it should be shown which determinants can be found at different chronological phases of a partnership from the general conditions for its formation to the output, namely, the grade of stability of the partnership. Furthermore, the model shows where social mechanisms can be located, namely, with the theoretical explanation of the path dependencies. Simply put, the social mechanisms we are searching for are hidden in each effect which the determinants shown have on each other or, to simplify, have to be added to each arrow in the figure. In accordance with the
purpose of this paper, to show the possibilities of mechanistic explanations, it is obviously impossible to try to include all coherencies and thereby all possible mechanisms that can explain them. Therefore, we have to choose another, to be exact, a reversal strategy. First it is not our intention to explain the phenomenon within all its facets; thus we must be content with concentrating on one level of determinants, namely, the matching process. Second, in the section above, it was generally shown how the principles of analytical sociology, exchange theory and the new home economics can be integrated. Thus, for now, we will outline these general ideas on the field of separation and show how a mechanistic explanation based on these well-known theories can be treated, although we are aware there might be other complementary theories that can supply further mechanisms. In fact, our concern is not and cannot be to design a complete empirical model, but we are restricted to a clearly defined example.

Figure 1: Theoretical (process) model demonstrating determinants of the partnership stability (Source: Arranz Becker 2015, 536).

The advantage of our strategy is obvious: we do not need to observe any possible mechanism to explain the entire phenomenon of partnership stability. But we do not want to conceal that this fact can also be seen as a disadvantage. Nevertheless, our aspiration should be clear at this point: we consequently decided against the facts above called into question. First, from our argumentation, it is hardly possible to design a theoretical model for all existing mechanisms.
to explain the instability of a partnership in general without being superficial and “theoretically poor” (Sørensen 1998, 238). Furthermore, to show the power of mechanistic explanations, it is not necessary to use complex autotelic data structures and statistical procedures because they should also work within really simple analyses without the replacement of explanations by naming correlations. Therefore, in the next step, we have to point out which theoretical mechanisms we want to observe at which state of the process model.

Models based on exchange theory were developed especially by Lewis and Spanier (1979; 1982). The first study on marital stability within the new household economics is by Becker, Michael, and Landes (1977). An integrative model also takes the union as the starting point, which normally is stable as the result of a comparison of the output (in the one tradition of an exchange process, in the other, of a production process) of the union with other living arrangements. Opportunities and constraints have been considered. The question now is how this small core model can be enhanced by different mechanisms to connect sociostructural conditions with the main constructs, that is, with the partnership outcome, the alternatives, and the social barriers. What theoretical mechanisms are at work? And how can they be empirically tested?

The point at which we want to enter into the discourse is the matching of the partners. As one can see in the process model, there are two leverage points where a mechanistic explanation is possible. First, it can be questioned how the process of adjustment of two partners occurs. Second, it has to be analyzed how the matching of the partners leads to a specific stability level over the relationship quality, partly indirectly via the achieved investment into it. So from our theoretical framework, four different mechanisms will be discussed and later used for the interpretation of the empirical test. For the first point, we were concerned with the matching processes of the union (i). According to Hedström and Swedberg (1998b), this covers a specific social situation that causes a person to act in a specific way that can be stabilizing or destabilizing for the relationship. It can thus be called a situational mechanism. In the case of the impact of matching on the partnership quality or rather stability, we concentrated on the indirect effect of the matching over the investment into the relationship by children (ii), the institutionalization of the partnership (iii), and the gain of specialization in terms of labor division within the association (iv). With Hedström and Swedberg (1998b), these are action-formation mechanisms on the micro-level which arise from the above-mentioned action theories chosen as examples.

(i) In all theoretical consideration but also in folk knowledge, the matching of the partners is one or sometimes even the main reason for a good and therefore stable partnership. In a long tradition of homogamy research in family sociology, matching means that partners are more or less equal within characteristics which are complementary (for example, moral values, education, religious denominations, or even age) but differ concerning substitutable characteristics such as employment, career or family aspirations (see again Arránz Becker 2015). It is assumed that compatible partnerships have no adaptation problems as well as the possibility for a better interaction outcome because of the same or addi-
tional interests and lower transaction costs. To test these assumptions, we chose several possible examples because we definitely could not consider them all. So we decided to observe homogeneity in age (Kalmijn/Loeve/Manting 2007) and education (Beck/Hartmann 1999; Diekmann/Schmidheiny 2001) and, with that, two complementary features that should be homogenous. Here it must be added that homogeneity in both cases does not categorically mean exactly the same value but a small cultural scope that normally benefits the male partner (Arránz Becker 2015). In other words, in a stable partnership, males are usually equally or, to a certain extent, slightly better educated and a bit older than the females; whereas older or better educated women are likely to lead to more instability. At this point, we decided not to consider substitutable features such as the level of occupational aspiration (Beck/Hartmann 1999; Kalmijn/De Graef/Poortman 2004; Poortman 2005) because we can observe only the status quo of the employment homogeneity. A problem arose here because we did not know whether this was a criterion during the process of searching for a partner or the matching of the partners or whether it is the consequence of an adaptation of the partners over time. In any case, it definitely is a hint of specialization, another mechanism that we will illuminate under (iv). But naming what matching of two partners means still does not answer the question of how it is produced. So what is the mechanism behind the matching process?

It is not always easy to determine mechanisms influencing the matching quality. In economic thinking the search process plays an important role and, from our point of view, it contains respectively the mechanisms that lead from the beginning of the search to the matching of a partnership. The idea behind that argumentation is that the more effort spent in finding a partner by searching for a longer period, the better the two will match each other (Becker et al. 1977). Thus, a perhaps crude but appropriate indicator for that process is the search time. How then does this process work? According to Arránz Becker (2015), a longer search leads to a better information level about the partner, increases the prosperity level, and includes a maturing process of the potential partners. Incidentally, the longer the search lasts, the smaller the partner market becomes. Fewer alternatives to a partnership stabilize it. In the majority of cases, this effect has been researched for marriages (Diekmann/Schmidheiny 2001; Rapp 2013; Wagner/Weiß 2003). Unfortunately, the state of the art solution is not obvious for the question of whether there is a pure stabilizing or even a U-shaped effect on the instability of a partnership (e.g. Lehrer 2008), but this problem may be the consequence of a selection effect caused by the observation of marriages instead of partnerships in general (Axinn/Thornton 1992; Woods/Emery 2002). In contrast, Brüderl et al. (1997) show that an operationalization of the search time instead of the age at marriage could fix that problem, showing the assumed stabilizing effect. If we consider these ideas valid, an early starting point of the relationship stands for an incomplete search process, a less optimal matching that may lead to a lower partnership or marriage quality and a higher separation or divorce propensity. According to the cohort-sequence-design of the pairfam study (see next section) the duration of the partnership should have a negative effect on stability. Also the number of former partners may be viewed
in the same manner: a greater number of further partners stands _ceteris paribus_ for a more extensive search (Becker 1981). Generally the older cohort should also display a greater matching quality due to the longer time available.

(ii) If romantic unions produce commodities for the involved couple, the production depends on human resources but also on the specific investment in the relationship. This means that available resources like time or money but even emotions are spent for the family to ‘produce’ goods that can be ‘consumed’ together but—and this is the more interesting point for our purpose—which lose their value at least partly in case of separation (see Becker et al. 1977; cf. Arranz Becker 2015). Thus the mechanism behind those investments in terms of an economic paradigm is twofold: to invest in a partnership means to increase its consumption benefit, but also to increase the potential cost of a separation. Therefore, all investments which are highly valuable inside the partnership but have no or at least less value outside it should stabilize the union. But it is not sufficient here to imagine classical consumption goods such as shared property (see Brüderl/Kalter 2001; Ostmeier/Blossfeld 1998). In the literature, the most serious partnership-specific investment is the expenditures for mutual children, which are a serious barrier to a separation (see Boyle/Kulu/Cooke/Gaule/Muker 2008; Brüderl/Kalter 2001; Cooke 2004; Diekmann/Engelhardt 1999; Diekmann/Klein 1991). Thus the second focused mechanism of the impact of a good matching on the stability of a partnership is that well-fitting relationships are the more willing to invest, especially with mutual children, which have a strong stabilizing effect. However, it is obvious in the literature that this effect is confined to mutual biological offspring, according to which children existing outside the partnership, mostly from a former partnership, can be seen as negative specific investments (cf. Gostomski 1998, Gostomski et al. 1998).

(iii) The behavior of men and women in partnerships does not correspond to real market processes with a high rate of change and volatility. Partnerships build a kind of production unit and organization which facilitates handling the problems of incomplete contracting through hierarchies. Of course, the formation of such an organizational unit is a time-consuming and non-trivial process as aforementioned, as is the institutionalization of a partnership (see Kopp et al. 2010). One must remember that this was characterized as a consecutive process of solidification; it has much to do with the investment in partnership-specific capital, which is again the underlying mechanism. In other words: every further step of institutionalization means investing resources to generate a better organizational structure and thereby a better output of the union for both partners but also building additional barriers against a separation by increasing its costs. Institutionalization should therefore be a stabilizing factor for all romantic unions (cf. Arranz Becker 2015, 543; Asendorpf 2008; Kalnijn et al. 2007; Poortman/Lyngstad 2007). As stated elsewhere (cf. Kopp et al. 2010),

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5 For a more differentiated and detailed depiction, see Arranz Becker et al. 2015.
6 Even in a market situation, much non-market or organizational behavior can be observed, indicating that other models and mechanisms are adequate (see Granovetter 1985; Hirschman 1970; Williamson 1975).
there are more or less common sequenced steps in this process, introduced by small things such as a tooth-brush of one’s own in the partner’s apartment or a photograph in the wallet, up to higher levels of institutionalization such as introducing the partner to one’s parents, moving in together or marrying. It is our aim to focus again on the most important steps in this process, which can easily be observed. Summarizing the argumentation above and the actual state of research, cohabitation and marriage might be those steps.

(iv) Referring to the last mechanism mentioned above, we have investigated the gain of partnerships. In the fundamental theorem of the exchange theory and the new home economics, the stability of a romantic relationship depends especially on the difference in the evaluation of the present relationship with the best alternative. This difference is also called the gain of the partnership. All socio-structural factors which influence one of the two sides of this comparison have an influence on the stability of the union and are of interest in researching the determinants of separation. The previous mechanisms behind the institutionalization of a partnership and the investment in mutual children—and it might be a point of discussion whether children are possibly a step toward institutionalization—are mainly to produce barriers against a separation, which cannot be seen directly as a gain, maybe quite the contrary, if we refer to terms of opportunities and freedom. The situation is different for another mechanism that is especially focused on in the new home economics, namely the specialization effect. Partnerships allow an intensified labor division and thus a distinct specialization of the partners. Becker (1981) concludes that an asymmetric investment in household and labor market skills is the optimal investment strategy because specialized partnerships are more able to efficiently produce commodities, whereas the double burden of household and gainful employment normally destabilizes a relationship (Cooke 2004; Stauder 2002). Thus, it should be stabilizing if the partner with the potentially higher market productivity concentrates on employment while the other one focuses on the household chores. It is well known that there is a clear gender-specific aspect in this concept: with few exceptions that would go beyond the scope of this article, there is a stabilizing effect if men concentrate on the labor market, whereas it is destabilizing if women do so (cf. Arránz Becker 2015, 541ff.). Thus, empirically, partnerships in which only the male partner invests in the labor market should be more stable than unions in which both partners do. It is noteworthy here that there might be a second mechanism besides the specialization effect that demonstrates why labor division can also be seen as an investment in partnership-specific capital: whereas employment in the labor market exhibits better living conditions in the case of separation, focusing on the household does the exact opposite. Consequently for at least one, and in the most cases the female partner, this de facto more efficient strategy of commodity production also means building another barrier

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7 Arránz Becker 2015 summarizes the current research. For example, he shows that for a higher occupational aspiration by women there are both stabilizing and destabilizing effects (Beck/Hartmann 1999; Sayer/Bianchi 2000; South 2001; Poortman/Kalmijn 2002; Jalojärvi 2003; Kalmijn/De Graef/Poortman 2004; Poortman 2005; Sverre/Verner 2008; Schott and Hornberg 2011).
against a separation because the advantage of an arrangement such as that is partnership specific. So when the current partnership ends, the market position of especially that partner is exceptionally inauspicious.

Although not entirely integrated in this theoretical realm of social mechanisms, there are several potential influential parameters which we think we have to incorporate in accordance with our argumentation above. As we can learn from the process model, there are also normative orientations influencing the stability of a relationship. In fact we know that religious beliefs might provide such an orientation. Normally, we would argue that this is not the state of the process model we wish to observe for our example. But what the process model does not show is that, in fact, such normative values can also influence the mechanisms we care about. Empirically it can be shown that, within the matching process, there are clear tendencies toward searching for a partnership with homogenous religious beliefs (Klein 2015). Moreover, even though in nearly all denominations a formalized union is encouraged, there might be a difference between them concerning the character not only of the sanctity of the union but also the investment into the partnership, for instance, into children or the institutionalization of the partnership. Thus even if we do not explicitly wish to deal with that point, we have to control for it. The same applies to the above-mentioned difference between eastern and western Germany (Kreyenfeld/Konietzka 2015). Consequently, an east-west dimension must be included in the analyses.

In the following part of the paper, the different mechanisms will be utilized to interpret a short and simple empirical analysis employing the first two panel waves of the German Panel Study of Intimate Relationships and Family Dynamics (pairfam).

4. Data and Method

At this point, we must summarize again which aim the following analysis does and does not have. The preceding discussion shows two different things. First, it is obviously clear that even with a confined focus on a selection of possible mechanisms, an exhaustive analysis must be extremely complex. The more important second point is that most of the presented mechanisms are processes that can hardly be operationalized directly by a quantitative approach but only by their results. For instance, the negotiation process of a labor division may be observed qualitatively, but what we can measure is only the result, namely, the level of labor division of a couple for a specific time. What we have to realize is that we can hardly test the mechanisms themselves but only proxy variables which we think are representative of the mechanisms in a theoretical way, showing that the process took place. What we want to show is the explanatory power of social mechanisms for classical empirical research in the field of the family. Even if, and we are actually skeptical about this, one could find a good way to measure mechanisms directly, the explanation needs to be even more focused than our attempt. Therefore our idea is definitely not to prove the underly-
ing mechanisms by decomposing the correlation between two variables such as mutual children and the stability with other variables, forming the, at least, psychological barriers against separation consisting in having children together. This might be one of the next steps in research, but for now, we want to show only how social mechanisms can be used to convey simple correlations—above, we called it variable sociology—into an analytically sound explanation by using theoretical considerations for underlying mechanisms.

We therefore need a simple, multivariate model that contains some of the so-called proxy variables as examples which indicate the mechanistic processes defined in section 2 of this paper and then explain them in the light of social mechanisms. As mentioned, we decided to use longitudinal data gained from the German Family Panel (pairfam), release 4.0 (Nauck et al. 2013). A detailed description of the study can be found in Huininik et al. (2011). Nevertheless, to keep the model simple, we decided to use only the first two waves. The study includes broad information about the partnerships of the respondents and therefore constitutes a test of the mechanisms connecting social characteristics and the risk of separation sketched above. The initial, representative sample in pairfam consists of 12,402 randomly selected so-called anchor persons out of three age cohorts which were 15 to 17 (born between 1991 and 1993), 25 to 27 (born between 1981 and 1983) and 35 to 37 (born between 1971 and 1973) years old when first surveyed between the end of September 2008 and the beginning of May 2009. In the second wave, conducted round about 12 months later, between October 2009 and April 2010, 9,069 of them were interviewed again. Because of the specifics of relatively young couples who may tend to have short and weak partnerships (see Wendt 2008), the first cohort is excluded from the analyses. Furthermore, homosexual couples are also excluded from the analysis. This group might be very interesting concerning the underlying mechanisms, but they show substantial differences in the social dynamics (Lau 2012). For example, if we want to show that traditional role allocations with regard to the labor division have a stabilizing effect, we have to note that in homosexual relationships there cannot be traditional constellations because, as mentioned above, they are naturally thought to be gender specific. The second argument is a statistical one. In large representative samples such as pairfam, the number of homosexual respondents normally is much too low for decisive outcomes. It would, of course, be possible and exciting to analyze such relationships, but in fact, a more specialized research design is needed.

The test of a causal impact of the corresponding determinants on a dichotomous variable that represents the event of separation until wave two \( t_1 \) in a panel data set facilitates methodologically a logistic discrete-time event history model. Of course, there are many more complex alternatives such as structure equation models, but, for our above-mentioned aim to demonstrate our explanation as simply as possible, event history models seem to be appropriate and should be the best choice. Because there is only one period observed, this

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8 This paper uses data from the German Family Panel pairfam, coordinated by Josef Brüderl, Karsten Hank, Johannes Huininik, Bernhard Nauck, Franz Neyer, and Sabine Walper. Pairfam is funded as a long-term project by the German Research Foundation (DFG).
can be called the special case of a one-period-per-person structure.\footnote{Normally, such analyses need a long-format data structure where every row represents one period of measurement for all respondents.} The main reason for this kind of event history analysis is that panel data are generally left-truncated. This means that all respondents were exposed to the risk of separation even before their first interview. In consequence, people with the highest level of this risk are underrepresented in data because they have a greater possibility of separation before $t_0$ and then are not considered in the model. Consequently those conventional continuous-time models would supply biased estimations (Guo 1993; Singer/Willett 1993/2003).

5. Operationalization and Description of the Variables

It is not always clear whether even between two persons there exists a mutual partnership (Knab/McLanahan 2007). Thus we, first of all, want to present the measurement of partnerships used here. In a second step, the concept of separation and divorce must be defined. To determine whether there is a current partnership, the respondents were asked “In the following, I'll ask you about intimate relationships. Do you currently have a partner in this sense?” with the response categories “Yes”, “No”, “Don’t know” and “No answer”. For our analyses, we concentrated on persons who themselves define their relationships as intimate. With these specifications we surveyed 6,047 persons in a partnership at the time of the first wave ($t_0$). As dependent variable, we used the event of separation of these partnerships until the second wave ($t_1$). The dependent variable, whether there is a separation, is constructed of questions about the sequence of separation. Pairfam uses an event history calendar which is able to identify whether the current partner in the second wave is the same as in the first wave or whether current singles had a partner at the previous wave. The section of questions about the sequence of separation is filtered from this information, so that we can be certain that only respondents with a separation between the two interviews have valid answers to these questions (including the response categories “Don’t know” and “No answer”), so that we were able to use them for the construction of our dichotomous dependent variable. We finally obtained a net sample of 4,114 respondents from whom we have the information about whether they are separated and at least 167 events of separation.

One of the main advantages of pairfam is that unfortunately not the mechanisms themselves but at least most of the indicating or proxy variables for matching and partnership-specific investment processes we depicted in the section above can be proven directly. Four mechanisms were proposed above and different hypotheses were suggested. We demonstrated by which empirically measurable variables (affecting the probability of separation and divorce) these hypotheses are influenced. First, the matching of the partners was treated (i). We pointed out that this process is influenced by search activities (Becker 1981) and can be represented by the duration of the partnership. Although counterintuitive, a longer duration stands for an early beginning of the partnership and
thus for a higher probability of an incomplete search process. On the other hand, the duration of the relationship is a necessity for event history analyses. Therefore, the duration also stands for the process time, more precisely the time spent at risk of separation. Moreover, we have to control for the cohort, because they may systematically tend toward different patterns of partnership stability, the so-called cohort effect (cf. Mayer/Huinink 1990). We considered that possibility by utilizing dummy variables, using the cohort 1981–1983 as the reference category. Furthermore, we have explained that homogamy is also an indicator of the matching process. Therefore, as an example, we included the level of homogeneity regarding age—absolute age difference—and education by dummy variables. In both cases, they show a gender-specific effect of inhomogeneity with the case of the same age or education as reference category.

In addition we introduced potential mechanisms showing how the fit of two partners influences the stability of the union by specific investments into commodities (ii). First we pointed out, that—in regard to our available data as well—children especially can be analyzed in this field. In fact, there is no need to show an impact of a perhaps complex, nonlinear effect caused by the number of children. The only thing we were interested in is whether there is an investment in children at all. But, obviously, there is a need to differentiate at this point. First, it is also necessary to consider pregnancies because they may have the same stabilizing impact. Second, there may exist children from previous partners brought into the partnership, a component which, as argued above, probably has a negative impact on the stability of the relationship. Therefore, besides a dummy variable for mutual children, pregnancies and children with previous partners were included separately in the model.

As a third mechanism, the process of institutionalization (iii) was formulated, represented by two dummy variables which indicate whether the couple is cohabitating or married. As a last aspect, we considered variables that stand for a mechanism of the division of labor, influencing the potential gain from the partnership (iv). Therefore, we included variables that show whether there is a homogeneous pattern of full-time employment. To cope with a possible gender aspect, we differentiated between who is employed full-time, the male or female partner. Moreover, we hypothesized that there are several normative values that may influence both the stability of the union and the mechanisms we dealt with. As we mentioned above, there are two more items of proxy information that we were able to use to control for them, namely, religious denominations and whether a person lives in eastern or western Germany. We suggested that the question arises again as to which mechanisms are influential here, but that would go beyond the confines of this paper. At the end of this paper, we will discuss the possibility of a further statistical test of social mechanisms themselves. For now, we restrict ourselves to the control of the religious affiliation with the answer categories ‘Catholic’, ‘Protestant’, ‘other denomination’, which also includes Islam and Judaism, and ‘no religion’, which were dummy coded. Finally, another dichotomous item was included for a current residency in eastern Germany. In table 1 descriptive statistics for our independent variables are shown, with all
results presented not only for the total sample but also for the stable unions and for the partnerships which are separated in the second wave.

Table 1: description of the used variables

<table>
<thead>
<tr>
<th>Partnership at $t_1$</th>
<th>Stable M(SD)/percent</th>
<th>Separation M(SD)/percent</th>
<th>Total M(SD)/percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATCHING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age difference in years</td>
<td>3.90 (3.72)</td>
<td>4.10 (3.86)</td>
<td>3.92 (3.81)</td>
</tr>
<tr>
<td>Difference: man older</td>
<td>72.7% (63.7%)</td>
<td>72.6% (72.6%)</td>
<td></td>
</tr>
<tr>
<td>Difference: woman older</td>
<td>17.6% (26.3%)</td>
<td>17.6% (26.3%)</td>
<td></td>
</tr>
<tr>
<td>Education homogeneity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhomogeneous: male higher education</td>
<td>31.9% (30.5%)</td>
<td>31.7% (30.7%)</td>
<td></td>
</tr>
<tr>
<td>Inhomogeneous: female higher education</td>
<td>23.1% (23.1%)</td>
<td>23.4% (23.4%)</td>
<td></td>
</tr>
<tr>
<td>Duration of relationship in months</td>
<td>103.97 (70.39)</td>
<td>64.22 (64.26)</td>
<td>100.53 (70.88)</td>
</tr>
<tr>
<td>Number of previous partners</td>
<td>1.20 (1.24)</td>
<td>1.44 (1.16)</td>
<td>1.19 (1.22)</td>
</tr>
<tr>
<td>INVESTMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutual children</td>
<td>57.5% (54.4%)</td>
<td>28.7% (28.7%)</td>
<td></td>
</tr>
<tr>
<td>Pregnancy</td>
<td>6.9% (6.2%)</td>
<td>- (6.2%)</td>
<td></td>
</tr>
<tr>
<td>With previous partner</td>
<td>9.8% (10.2%)</td>
<td>18.0% (10.2%)</td>
<td></td>
</tr>
<tr>
<td>Institutionalization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohabitation</td>
<td>84.3% (81.6%)</td>
<td>50.9% (57.1%)</td>
<td></td>
</tr>
<tr>
<td>Marriage</td>
<td>59.9% (57.1%)</td>
<td>28.1% (57.1%)</td>
<td></td>
</tr>
<tr>
<td>Labor division</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homogeneous: both full-time</td>
<td>23.2% (24.0%)</td>
<td>31.3% (34.0%)</td>
<td></td>
</tr>
<tr>
<td>Homogeneous: both not full-time</td>
<td>17.1% (18.0%)</td>
<td>24.5% (24.5%)</td>
<td></td>
</tr>
<tr>
<td>Inhomogeneous: male full-time</td>
<td>52.5% (50.7%)</td>
<td>38.0% (38.0%)</td>
<td></td>
</tr>
<tr>
<td>Inhomogeneous: female full-time</td>
<td>7.2% (7.2%)</td>
<td>6.1% (7.2%)</td>
<td></td>
</tr>
<tr>
<td>CONTROLS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1971-1973</td>
<td>57.8% (54.9%)</td>
<td>35.9% (44.2%)</td>
<td></td>
</tr>
<tr>
<td>1981-1983</td>
<td>42.2% (45.1%)</td>
<td>64.1% (51.8%)</td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>31.2% (30.5%)</td>
<td>25.7% (30.5%)</td>
<td></td>
</tr>
<tr>
<td>Protestant</td>
<td>31.2% (30.5%)</td>
<td>28.1% (30.5%)</td>
<td></td>
</tr>
<tr>
<td>Other denominations</td>
<td>8.2% (10.3%)</td>
<td>5.4% (10.3%)</td>
<td></td>
</tr>
<tr>
<td>No religion</td>
<td>28.8% (28.7%)</td>
<td>40.7% (28.7%)</td>
<td></td>
</tr>
<tr>
<td>Living in eastern Germany</td>
<td>18.4% (18.4%)</td>
<td>25.7% (18.4%)</td>
<td></td>
</tr>
</tbody>
</table>

N 3947 167 4114

Table 1: Description of the used variables (source: pairfam, wave 1 and 2, our calculation)

Table 1 shows some interesting but theoretically not always expected results when the first two columns are compared. Concerning the matching variables, in a bivariate and descriptive fashion separated people initially have more former partnerships and a shorter duration of the partnership. Thus the matching
arguments seem plainly wrong for those issues. But it must be kept in mind that these arguments should be taken together, so that a bivariate perspective may not disclose the true mechanism because the variables may be confounded with each other. For example, one can see that younger persons are more strongly represented within the group of the separated partnerships. Thus it is not surprising that they represent on average also the briefer partnerships because younger people in general do not have the opportunity to form extended relationships. In other words, a shorter relationship within a younger cohort does not unconditionally stand for a better search process but for a different opportunity structure. Without controlling for the birth cohort, that effect cannot be interpreted in the above-mentioned way. In addition to that, the duration of the partnership can also be discussed in the sense of the investment mechanism: it was argued that the institutionalization of and the investment into a partnership is a process that needs a certain amount of time. In the literature there is some evidence that a longer duration of the partnership may also produce the opportunity to stabilize it by different forms of investment (Arránz Becker 2015, 543; Kopp et al. 2010). In that case, the duration of the partnership would not be a valid measurement for the matching process but for the investment into the partnership. If this is true, the slightly stabilizing effect of the partnership duration should disappear in a multivariate analysis by controlling for the investment. Moreover, in respect to the effect of homogeneity in age and education, the descriptive results point in the direction we hypothesized: as a tendency, the age difference and the education gap are slightly higher within the group of unstable partnerships, in either case for the female partner's benefit.

In regard to the variables for the investment into partnership-specific capital, the descriptive results point in the hypothesized direction: unstable partnerships have mutual children less often, and more often children outside the current partnership, and are less institutionalized in forms of cohabitation or marriage. Moreover, there is a higher ratio of couples with both partners homogeneously full-time or not full-time employed, which can be interpreted as a sign of a suboptimal labor division. Finally, the control variables also show the hypothesized effects of the alleged value systems: unstable partnerships occurred more often where there is no religious denomination and where the respondent lives in eastern Germany.

Although these findings are interesting in themselves, a clear causal statement—and it must be remembered that is the aim of mechanistic explanations—cannot be drawn from pure descriptive and bivariate observations because the argument of perhaps confounded results fielded for the interplay of age and the duration of the partnership must be considered here as well. The only way to be sure is to compute multivariate analyses.
6. Results

The results of the multivariate discrete time event history analysis are shown in table 2. To facilitate the interpretation, we presented not the effect $\beta$, but the exponential effects $e^\beta$. These effects can be understood as a multiplicative effect: if $e^\beta$ is below 1, a negative or stabilizing effect was found, whereas $e^\beta$ above 1 indicates a higher risk of separation. Besides these effects, the Wald statistics and thereby the significance can be deduced as well. In model 1, the descriptive results are repeated in a bivariate calculation that can be called zero-order models. With the help of these models, the discussed bivariate associations are comparable and can be tested for significances. The results of the multivariate calculation are shown in model 2.

Following the logic of section 2, we may look first at the matching variables listed in the upper part of table 2. First, it is remarkable that in the multivariate case we did not find any effect for our chosen variables representing the fit of the partners, namely, the homogeneity in age and education. Even the surprisingly stabilizing effect of the partnership duration seen in the descriptive findings replicated in the bivariate analysis in table 2 disappears. In a stepwise estimation (not presented), we tried to identify which of the potential mechanisms are responsible for that outcome. As we hypothesized in consequence of our descriptive analysis, this occurs as a result of the investment variables, especially from the effect of cohabitation, which is obviously the strongest one in our models. At this point it is possible to reconstruct the mechanistic explanation. The longer the partners are together, the more they are committed to the partnership and the more they are willing to invest in it by living together or having mutual children. Both are commodities to earn a specific outcome but they simultaneously create serious barriers to dissolution. Thus, from our analysis, we find serious evidence for the stabilizing mechanism of investment in the partnership. Incidentally, getting married does not influence the stability of the relationship in that manner. In the stepwise estimation not displayed, the effect of marriage also dissolves with the inclusion of cohabitation. This is a good indicator of the changed living arrangements and the pluralization of biographies in Germany in the last decades, where the formal act of marriage, controlled for religious beliefs, does not have a stabilizing effect per se any more. In contrast, investment outside the partnership has the assumed destabilizing effect: a child from a bygone partnership raises the separation probability significantly by around 70 percent.

But why are there not any effects that can be explained by a matching mechanism? And why does the duration variable end in a nil-effect instead of turning into the anticipated positive (destabilizing) one? This fact may occur from the
### Table 2: Determinants of separation

<table>
<thead>
<tr>
<th>Category</th>
<th>Model 1 (zero order)</th>
<th>Model 2 (multivariate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATCHING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>age difference in years</td>
<td>1.00 (.00)</td>
<td>1.01 (.23)</td>
</tr>
<tr>
<td>difference: man older</td>
<td>.80 (.63)</td>
<td>.76 (.76)</td>
</tr>
<tr>
<td>difference: woman older</td>
<td>1.28 (.68)</td>
<td>1.17 (.23)</td>
</tr>
<tr>
<td>education homogeneity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhomogeneous: male higher education</td>
<td>1.01 (.004)</td>
<td>1.01 (.002)</td>
</tr>
<tr>
<td>Inhomogeneous: female higher education</td>
<td>1.37 (2.65)</td>
<td>1.34 (1.90)</td>
</tr>
<tr>
<td>duration of relationship in months</td>
<td>.99 (47.45)**</td>
<td>1.00 (0.05)</td>
</tr>
<tr>
<td>number of previous partners</td>
<td>1.01 (.02)</td>
<td>1.04 (0.23)</td>
</tr>
<tr>
<td>INVESTMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mutual children</td>
<td>.48 (12.86)**</td>
<td>.64 (2.79)+</td>
</tr>
<tr>
<td>pregnancy</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>with previous partner</td>
<td>1.47 (3.28)+</td>
<td>1.72 (4.64)*</td>
</tr>
<tr>
<td>institutionalization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cohabitation</td>
<td>.27 (43.86)**</td>
<td>.38 (19.07)**</td>
</tr>
<tr>
<td>marriage</td>
<td>.40 (18.07)**</td>
<td>.87 (2.62)</td>
</tr>
<tr>
<td>labor division</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inhomogeneous: male full-time</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>homogeneous: both full-time</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>inhomogeneous: both not full-time</td>
<td>1.46 (3.19)+</td>
<td>1.05 (.05)</td>
</tr>
<tr>
<td>inhomogeneous: female full-time</td>
<td>.88 (.13)</td>
<td>.52 (2.66)</td>
</tr>
<tr>
<td>CONTROLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cohort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981-1983</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1971-1973</td>
<td>.71 (3.42)+</td>
<td>.62 (4.19)*</td>
</tr>
<tr>
<td>religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Protestant</td>
<td>1.05 (.05)</td>
<td>1.11 (.19)</td>
</tr>
<tr>
<td>other denominations</td>
<td>.83 (.25)</td>
<td>1.28 (.39)</td>
</tr>
<tr>
<td>no religion</td>
<td>1.60 (5.59)*</td>
<td>1.82 (5.70)*</td>
</tr>
<tr>
<td>living in eastern Germany</td>
<td>1.55 (5.71)*</td>
<td>1.28 (1.18)</td>
</tr>
</tbody>
</table>

| N                         | 3712                 |
| -2LL-Chi²                 | 1117.7               |
| R² (Nagelkerke)           | .123**               |

*p < .10; * * p < .05; ** p < .01

Following the logic of section 2, we may look first at the matching variables listed in the upper part of table 2. First, it is remarkable that in the multivariate case we did not find any effect for our chosen variables representing the fit of the partners, namely, the homogeneity in age and education. Even the surprisingly stabilizing effect of the partnership duration seen in the descriptive findings replicated in...
the data structure, only separations between the panel waves can be observed. Therefore, a selection process of stable partnerships is at work which we can call a Cinderella effect: only 'the good ones' are in the sample at the first point of observation, whereas people with very early partnerships, a suboptimal matching however brought about, and thus—regarding our hypothesis—the highest risk of separation, were perhaps separated before the first observation or even simply did not enter into an intimate relationship, so that they are systematically underrepresented in our model. What we can summarize then is that, in an established union, the matching variables examined are not crucial any more. However, there is theoretically strong evidence that they might heavily influence the search process that we cannot depict here.

If we once again look at the investment mechanism dealing with the gain of the partnership through labor division and specialization, the processes formulated especially by Becker (1981) do not also have an effect on the relationship stability. Although it is often criticized in regard to the above-mentioned argumentation, it follows that partnerships in modern societies cannot be characterized any longer as an economic supply unit which benefits from a strong division of labor and thereby from a great heterogeneity. Even more so, the only larger effect—although missing the significance level by a narrow margin—shows more stable relationships if women work full-time and men less. Of course, considering the age structure of the sample, the smaller size of this group illustrated in table 1 and the higher educational level, these may be partnerships with men still in the educational process or in vocational or professional education and thus another selection mechanism. But just as for the disappearing effect of marriage, our analysis can be seen as strong evidence for the modernization and pluralization of living arrangements.

Last but not least, we controlled for several variables that may represent a specific set of values. The first of them we called the cohort effect. That means that different birth cohorts may tend toward other patterns of partnership stability, for instance, because of another socialization or perhaps simply zeitgeist. We introduced that effect above with a methodological argument, but, in fact, it can also be seen in a mechanistic way to explain the rise in separations during the last decades if it is combined with the assumption of a modernization and thus a liberalization of living arrangements along with an increasing acceptance of separation and divorce in western societies. Actually, this can be shown from our results: as supposed, the older cohort has a significant, nearly 40 percent lower risk of separation. In addition to that, we controlled for religion and the east-west difference. First, it is obvious that a difference among the various denominations is negligible but that the absence of any religious belief has a significant positive effect: persons without a religious denomination show an 80 percent higher risk of separation compared to Catholic respondents. This can be interpreted as strong evidence for a stabilizing effect of any denomination. The mechanism behind that might be that, in each religion, partnerships are something sacred that should not be touched and the believers are willing to follow that norm. The bivariate difference between eastern and western Germany disappears. We also decided to decompose that effect by a stepwise model (not
presented) and find that the effect dissolves with the control of religious denomination. From that, we found a substantial argument for a mechanism underlying the difference in separation patterns in eastern and western Germany: people in eastern Germany separate more often because there is a less distinct pattern of religious beliefs, founded in the long secular tradition (Klüsner 2010; Kreienfeld/Konietzka 2015; Pollack 2002; Pollack/Pickel 2003).

7. Discussion

Of course, social mechanisms, like all other theoretical ideas, cannot be tested directly. In the old tradition of critical rationalism, one has to develop testable hypotheses out of the theoretical model and test these theses. It is simply true that there can also be other theoretical explanations with the same conclusion. Then one has to search for some critical experiments or rather a social situation where two models come to different conclusions. This is not a signal to stop searching but frequently a request for further research. In this article we worked out that social mechanisms play an important part in family sociology, even if the phrase is not even mentioned. The theoretical ideas are valid throughout a long discourse. Using and transmitting the idea of social mechanisms in the research of separation, we have presented four mechanisms as examples to show how an explicit mechanistic explanation could be used. An analysis of the data of the German family panel concludes that investing in partnership-specific capital and especially the institutionalization in the forms of mutual children and cohabitation uncover strong mechanisms of stabilization of close romantic relationships. The social processes which are labeled as specialization mechanisms are dominant in the theoretical argumentation by Becker (1981), and the new home economics, empirically at least, could now be neglected. Even the often belabored difference between eastern and western Germany can be explained by continuing differences in the prevalent value structures. The internal processes of the division of housework and labor market for the couple has to be researched further. Perhaps the surprising fact that partnerships in which both partners work full-time actually is not an indication of a missing specialization concerning the housework because there is some empirical evidence that the majority of that work is done by women even if they work full-time (Dette-Hagemeyer/Reichle 2015; Stutzer/Frey 2006). In this case, the secondary stabilizing effect may be an economic one, expressed by the higher household income.

Of course, there is much to be discussed, and there are plenty of unanswered questions. Especially because of the data structure the influence of the matching process the partners pass through at the beginning of their relationship cannot really be answered here because effects are not visible in our model but definitely should be there (see Häring et al. 2014; Klein 2015). At this point, the limitation of data sets such as pairfam becomes obvious: the survey is broadly conceived to produce a large amount of information about various aspects of the family, but deeply specific questions cannot be answered. To show that fact with a simple example, let us look at the case of marriage again. If we really want to identify
which causal influences marriage has on the stability of a union (and this means avoiding possible selection effects), we have to observe to a sufficient extent persons who were in an unmarried partnership at the beginning of our study, got married and, after that, separated. If we look for those people at the first two waves of pairfam, we find 121 marriages, but only one of them was separated again within that time. Even if this problem could be solved over several years by using numerous waves of the panel, the problem remains within the process of matching, because, if we are honest, we do not have any information about that because it took place before our first observation. Moreover, we talked about the statistical problem of left truncation in section 3. That may be the main problem of the quantitative research in this field: we normally do not have insights into the processes but only variables we believe more or less represent them. Even using an event history model that is discussed as an adequate model to analyze panel data (Guo 1993; Singer/Willett 1993, 2003), not all problems can be solved. The problem of causality is also still open, no matter how complex an analysis is made. We did not even try to make it complex to disguise that. The aim of this article was to show that, nonetheless, there seem to be no fundamental problems for social research. Although sometimes a rising crisis of empirical sociology is diagnosed (Savage/Burrows 2007), it can be shown here that *faits sociaux* can be explained and not only described or classified by the combination of a proper analytical modelling and empirical research. But, of course, that is not to say that social mechanisms cannot be operationalized and surveyed. In our opinion, to really model social mechanisms, it is time to leave the spheres of big data and come back to specific studies which are able to concentrate on exactly the mechanisms we are talking about.

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