

#### CHAPTER 18

# Life Trajectories as Products and Determinants of Social Vulnerability

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## Introduction

This chapter aims to show how the notion of life trajectories, considered empirically as sequential processes, enables us to uncover the dynamics of resources, reserves and stressors that correlate with social vulnerability. The life trajectory represents an overarching notion that combines three components (phases, events, transitions) influencing such dynamics (Levy and the Pavie Team, 2005). Indeed, while life phases are associated with specific resource and reserve opportunities, events and transitions challenge these opportunities and bring changes in one direction (i.e., accumulation) or the other (i.e., loss). In this chapter, a special focus is placed

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on life trajectories that deviate from the existing dominant patterns, as they may be linked to a higher level of vulnerability. Additionally, a selection of ascribed attributes such as sex, socioeconomic background and family configuration of origin is considered to understand their buffering or exacerbating impact on the link between life trajectories and vulnerability. Finally, we discuss the role of interpersonal relationships and how such relationships and life trajectories may be viewed as two overlapping representations of the same process, the former from a synchronic perspective and the latter from a diachronic perspective. Their mutual variations are an indicator of the reserves at hand—i.e., the level of resources that may be mobilised when needed—and hence of the individual's overall vulnerability (Cullati et al., 2018).

The chapter is structured in two main parts. The first part, *Life courses and trajectories*, presents a formal conceptualisation of these two notions, followed by an overview of their main structuring factors and their link to resource availability, reserve building and the associated stressors that may lead to vulnerability processes (cf. Chap. 2, this volume). After a brief overview of how to operationalise life trajectories into empirical sequences, the second part, *Dynamics of life trajectories in context*, is organised around the transition to, maintenance during and exit from adulthood and presents a series of research findings based on the Swiss context and focusing on family and occupation, as these are two central and interdependent life domains in which specific types of trajectories may be found. They serve as examples in the empirical discussion of the link between individual trajectories and vulnerability presented in the first part.

## Life Courses and Trajectories

Formally, an individual life course may be viewed as the variation over time of a series of social statuses and roles in a three-dimensional space (cf. Chap. 2, this volume; Spini et al., 2017; Levy, 2013). Its first dimension describes the different societal systemic levels of their occurrence (i.e., micro, meso and macro), the second distinguishes the life domains in which individuals are integrated (e.g., family and occupation), and the third considers the main chronological phases of life (e.g., education, production and retirement).

# A FORMALISED INTERDISCIPLINARY PERSPECTIVE

The multidimensionality of the life course has prompted scholars from various disciplines to find a common terminology to describe it as comprising four components: phases, events, transitions and trajectories (Levy and The Pavie Team, 2005). A phase describes a steady life period regarding an individual's social integration, characterised by stable statuses and roles (e.g., being a childless single with a full-time job or a married parent with a part-time job). A given phase is thus associated with specific relational and material resources and with particular options to accumulate them. An event occurs at a certain time and is given meaning by individuals. It can be normative and therefore socially anticipated, as is the case for marriage, or nonnormative and often feared, such as death or job loss. Meaningful events are sources of stress with varying intensity (Rosino, 2016) that, accordingly, challenge the functional balance of existing interpersonal dynamics (Olson, 2000). The changes associated with an event (addition or subtraction of network members, status modification, contextual change) often trigger life transitions, which are characterised by a swift transformation of the structure of an individual's roles. Transitions open to a new phase of life and offer a specific amount of resources that may or may not be accumulated (e.g., when becoming a graduate, parent, unemployed or divorced). Trajectory represents the overarching notion combining the three aforementioned components, namely, 'long-term patterns of stability and change, often including multiple transitions' (George, 1993, p. 358).

Although the idea of process has been central to many social sciences from their origin, it has been radically challenged in the wake of the twentieth century. During that time, the transformations associated with industrial and political revolutions triggered enduring adaptive challenges to be faced by most women and men. Such changes have increasingly drawn scholars' attention to conceptualising the unfolding of individual lives as 'temporal patterns of reciprocal determination' (Abbott, 1997, p. 1156). Elder et al. (2003) stated that the notion of the life course may be parsimoniously framed by using the following five key principles. *Time and place* draw attention to the importance of historical and geographical contexts to assessing the specific constraints weighing on individual lives. *Linked lives* refers to the notion of personal networks and underlines that life trajectories should be understood as constantly interacting with those of others. The notion of *timing* serves to differentiate the influence of an

event depending on whether it occurs early, on time or late against a given normative background (cf. pregnancy). Paying attention to *agency* allows us to understand how choices may lead to different outcomes when comparable individuals are facing a similar situation. Finally, *lifelong development* is what imbues the notion of trajectory with sociological meaning as a process that is never fully predictable until it has come to its end. From this perspective, individual life courses unfold within a multidimensional web of constraints and opportunities that structure them in a limited number of ways, each of them being associated with specific resources and reserve opportunities.

## LIFE STRUCTURING PROCESSES

One may consider here three main theses regarding how individual lives are structured (Levy, 2013), each of them shedding a different light on which resources are available and whether they can be accumulated. First, to what degree are individual lives standardised by the triple action of surrounding institutions, which contributes to (1) phasing the course of lives (e.g., by regulating entry into and exit from the labour market through an age-graded system); (2) relating individual lives (e.g., creating parentchild or partner dependence by establishing legal rights and duties); and (3) supporting them (e.g., taking over certain family tasks by providing childcare facilities)? Second, are they mainly gendered, which is different for women and men? Third, are they individualised, reflecting the changes associated with the second modernity (Beck & Beck-Gernsheim, 2001)? The most influential in this regard are the increases in birth control and divorce rates, along with the recognition of alternative family forms and the diminishing influence of the welfare state, the military and the church on the ways to live in society.

The institutionalisation of the life course lays the foundation for a possibly steady process of change in various contexts. The nature, direction and magnitude thereof are dependent upon endogenous and exogenous influences. Successive changes in the life course of individuals, for instance, in the spheres of family and/or occupation, are often associated with some upward or downward mobility (O'Rand, 2006) that modifies the resources and reserves available to them. Spini et al. (2017) therefore proposed considering vulnerability not only as an individual or collective static attribute associated with poverty, risk or insecurity but also as a process characterised by exposure to stress as well as the ability to cope with it and to

recover from it, thereby making the life course and vulnerability almost synonymous (see Chap. 2, this volume). This approach makes it possible to consider the amount of resources and reserves available to individuals over time as a dynamic, cumulative process by which certain distinctive features (ascribed or achieved) generate advantages regarding, for instance, wealth and well-being that accumulate over time, such as being a man, coming from a wealthy family, working continuously full time, having an educational degree or being born in 1940 rather than in 1920. The absence of these features tends to produce the opposite effect (Dannefer, 2003).

The following section uses the various conceptual elements presented to evaluate how social inequalities impact the unfolding of life trajectories in various life spheres, particularly regarding the resources available to individuals. It also seeks to help assess whether these inequalities are associated with a process of differential vulnerability, by which those with fewer resources are more likely to suffer more from stressors than others (cf. Chap. 2, this book).

# Dynamics of Life Trajectories in Context

In this section, we present a series of empirical studies, notably from the LIVES program, that have used individual life trajectories to identify the dynamics of resource availability, reserve building, and the associated vulnerability processes (Cullati et al., 2018; Spini et al., 2017). This section is organised around the transition to, maintenance during and exit from adulthood. Indeed, adulthood as a phase of life encompasses a series of role transitions in major life spheres and, hence, is a central and multidimensional marker of social integration (George, 1993; Shanahan, 2000). To better understand how individual lives are structured over time, different systemic levels (micro, meso, macro) and life domains (family and occupation) are considered jointly with indicators of social position.

The data presented here relate to the Swiss context. Switzerland is a small and wealthy federal state in the middle of Europe without being part of the European Union and is characterised by linguistic diversity, an important share of its population stemming from migration, and its low and stable level of unemployment. The welfare regime of Switzerland has been qualified as hybrid regarding the structure of its social insurance system, as it incorporates components of the conservative-corporatist and liberal models (Arts & Gelissen, 2002). For instance, work-family

conciliation is seen mainly as a private matter, as family policies tend to be comparatively weaker than in other European countries.

Finally, the empirical findings presented in this section are based mainly on sequence analysis. One difficulty associated with the analysis of life trajectories is the need to consider simultaneously the timing, order and duration of their components. Formally, it is possible to associate a sequence of states with any individual life trajectory, which is considered a chronological succession of statuses in one or several life domains. For instance, from age 20 to 35, the trajectory of an individual who lived five years with status 'A', three years with status 'B' and eight years with status 'C' may be expressed as T={AAAAABBBCCCCCCCC} or represented as the sixth sequence of the individual sequences of states presented in Fig. 18.1. There are many ways to deal statistically with sequences of states (e.g., Aisenbrey & Fasang, 2010; Studer, Gauthier and Le Goff, this volume), but let us briefly describe the core program of sequence analysis (Gauthier et al., 2014).

Once individual sequences are created, the next step is to evaluate how (dis)similar they are. This is performed by using, e.g., *optimal matching*, an algorithm that allows the quantification of the minimum number of elementary operations of insertion, deletion or substitution—called distance—that are needed to transform a source sequence into a target sequence. The larger this number is, the more dissimilar the sequences. In the third step, cluster analysis is applied to the matrix of all pairwise

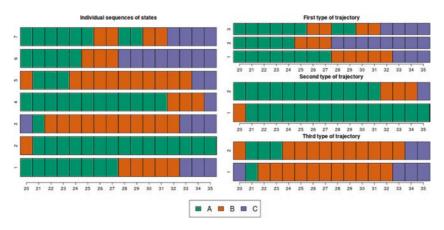


Fig. 18.1 From individual sequences of states to types of trajectory

distances to group together similar sequences, thereby forming a typology of sequences. Figure 18.1 presents, on the left, the initial seven individual sequences, which are gathered, on the right, into a three-type trajectory typology. Ultimately, the analysis aims to contextualise these types by using them as categorical variables in multivariate statistical procedures (e.g., logistic regressions).

## Transition to Adulthood

The transition to adulthood is a period of life characterised by crucial transitions in family and occupational domains (Buchmann & Kriesi, 2011). During this transition, the socioeconomic status of origin, which may be considered an initial reserve of resources, will strongly influence the ways in which individuals acquire first academic credentials and then occupational positions (Bourdieu, 1975). Nevertheless, other factors also exert a critical impact on this transition, such as the family configuration of origin and gender. In this section, we focus on three key dimensions of this phase of life: early family trajectories, school-to-work trajectories, and self-esteem trajectories.

# Leaving the Parental Home

At a mesosociological level, one central issue regarding the transition to adulthood concerns the departure from the parental home (Gillespie et al., 2020), a process in which the role played by sibling presence and interactions remains largely underexplored (Conger & Little, 2010). For Déchaux (2007), the tie between siblings is a 'derived link' whose quality depends on the intervention of the parents, or at least the mother, thereby making it ambivalent and lifelong. In terms of social capital, sibling dyads are configurations characterised by a certain level of trust that is associated with cooperation and competition to access scarce resources within the family (De Carlo & Widmer, 2011). These interactions exert a specific influence on the way siblings will experience most of their life transitions within the spheres of family and occupation (Conger & Little, 2010) and therefore on their opportunities to build potential resources and reserves. Rossignon et al. (2018) used sequence history analysis (SHA, see Studer, Gauthier and Le Goff, this volume) to assess the influence of childhood coresidence trajectories on the likelihood of leaving the parental home in Switzerland. They produced eight types of family trajectories preceding parental home departure, which are structured by the stability of the parental union, the birth rank of the respondent, the presence of siblings, the order of departure of siblings and the timing of birth and departure, as follows: (1) Both parents and siblings (40.5%); (2) Early arrival of siblings (28.7%); (3) Both parents to one parent (with siblings) (10.4%); (4) Early arrival of siblings and parental separation (6.2%); (5) Both parents to one parent (without siblings) (4.5%); (6) Both parents (4.1%); (7) Late departure of siblings (3.1%); and (8) One parent to both parents (with siblings) (2.5%). This typology reveals the presence of a dominant pattern (childhood spent in an intact family with at least one older or younger sibling) along with alternative models characterised by parental separation, family recomposition, and the arrival and departure of siblings. Interestingly, the patterns of family trajectories characterised by these events are significantly associated with leaving home early, which is not true when they are used as single, independent indicators. This difference shows that leaving home is sensitive to the occurrence, timing and ordering of events. An early departure from a parental home is a situation that may have consequences for subsequent transitions, accentuate resource deficits (Amato, 2010), reduce accumulation opportunities and favour vulnerability later in life.

# Entering the Labour Market

At a macrosociological level, Laganà et al. (2014) considered the transition from education to employment through the lens of citizenship and migration statuses to better understand the dynamics at play in (dis)advantaging second-generation migrants. In Switzerland, a large share of these transitions occur through the dual-track education system, which is characterised by an institutionalised alternation of in-school and in-enterprise components. Using a sequence analysis approach, the authors created a typology describing the seven years following the end of compulsory education in Switzerland, a crucial period regarding future educational and occupational attainment. The trajectories were constructed according to the domain of activity (education or occupation) and the hierarchy of activities (low and high vocational tracks, general education, low and high positions in manual or nonmanual occupations). Analyses evidenced five patterns of early social integration: (1) General education to university (32.9%); (2) Upwards educational mobility (16.3%); (3) Atypical educational trajectories (25.5%); (4) From low vocational education into labour

market (24.0%); (5) From low vocational into 'Not in Education, Employment, or Training' (NEET) (1.8%). The results showed that second-generation migrants were more likely to follow early transitions to low vocational tracks into the labour market or to NEET, a social integration associated with lower economic resources, fewer opportunities for saving and, thus, higher vulnerability. Moreover, compared to second-generation migrants originating from countries associated mainly with low-skilled migration, those coming from countries with higher-skilled migrants tended to follow more rewarding trajectories. Although upward mobility trajectories did take place among second-generation migrants, their socioeconomic background, which was considered an initial reserve, constituted a strong predictor of their school-to-work trajectory.

# Interplay of Institutional and Psychosocial Trajectories

At the intersection of micro- and macrosociological levels, the issue of gender is central to explaining another aspect of the differences in the school-to-work transition, as we can consider it both a socially structured and a structuring attribute (Risman, 2004). Using longitudinal data following the dual-track education system from age 16 to 23 in Switzerland, Gauthier and Gianettoni (2013) combined sociopsychological and sociostructural indicators to highlight how the structure of individual life courses reflects the influence of institutionalised gender-related norms. In Switzerland, where most mothers living in couples work part-time, women are predominantly associated with the domestic sphere and men with the public domain (Levy, 2013). The results showed that vocational tracks are gendered, with clear-cut male- and female-dominated pathways. They also indicated the hierarchical nature of these tracks, with the longer (4-year) tracks being male dominated, more prestigious and leading to better paid positions than the shorter (2- to 3-year) tracks. The combination of these two dimensions revealed that the wages of men following the 3- to 4-year tracks are higher than those of all other apprentices and that the income of women after a 2-year track is the lowest. As this transition occurs during a period of social integration and of (gendered) identity formation, the authors hypothesised a dynamic link between psychosocial indicators (e.g., the variation of self-esteem over time) and the institutional framework within which individuals are integrated. Three types of self-esteem trajectories were evidenced through sequence analysis: (1) Moderate and stable self-esteem (46.9%); (2) High and increasing self-esteem (30.7%); (3) Low

and stable self-esteem (22.5%). These trajectories were then used as a dependent variable in a logistic regression model in which sex and track duration were the explanatory variables. Compared to men, women were five times more likely to follow a low and stable self-esteem trajectory. However, among women, only those engaged in the 4-year, maledominated tracks had the same chance as men to follow a high and increasing self-esteem trajectory. Among men, however, only those following a 2-year track were marginally at risk of having durably low self-esteem. This finding is relevant as low self-esteem is correlated with lower academic achievements and with nonfunctional coping strategies, two factors that increase vulnerability.

### ADULTHOOD: MAINTENANCE DURING AND EXIT FROM

Adulthood is a period of life in which boundaries are blurry, as the transition to adulthood has become longer and more diversified in recent decades (Antonucci et al., 2014). Such changes have resulted at least partly from a postponement of traditional transition markers and a greater age variation in the timing of upcoming events (Buchmann & Kriesi, 2011). Adulthood is conventionally related to settling into work and family roles that, for many, do not happen until their 30s (Wong, 2018). Retirement is another milestone as it is associated with withdrawal from the labour market. Between those two main transitions, individuals are differently active within various social spheres, which results in contrasting life trajectories and, correlatively, more or less resource availability and reserve-building opportunities. In this section, we address the impact of family and occupational trajectories in dynamically handling the challenges of this period of life regarding female and male occupational trajectories, retirement age, and the development of personal networks.

# Standardised and Individualised Trajectories

Reflecting on the three macroscopic structuring processes of standardisation, gendering and individualisation described above, Levy et al. (2013) constructed types of individual occupational trajectories of individuals aged between age 16 and 65 and residing in Switzerland. The results revealed that men's trajectories were largely the standardised type (education followed by uninterrupted full-time occupation and retirement), whereas those of women were more diverse and sensitive to

sociostructural attributes. Four female types of occupational trajectories were uncovered. First, a *Housewife* type (13%, the functional complement of the statistically dominant male type) was characterised by a complete and definitive withdrawal from the labour market from the mid-twenties onward. This type was more frequent among married mothers born in the 1940s with lower educational credentials. Two types were more frequent among the younger generations and those with higher educational levels: the standardised *full-time* type (34%, similar to the male type) or the *part-time* type (23%, the only difference being the level of occupational activity). The former more often had no children or only one child, whereas the latter had fewer than three children. A further type of trajectory, labelled *Return* (30%), was characterised by a part-time return to the labour market following a period exclusively at home. This last type was more likely to be found by middle-educated women belonging to the younger generation.

This diversity of women's trajectories reflects their greater implication in both domestic and occupational spheres in Switzerland. The dynamics underlying their shape have specific, long-term consequences for resource and reserve acquisition and therefore for vulnerability. Reducing one's participation in the labour market exerts a direct impact on pension savings and, consequently, on the expected benefits after retirement (see below). Similarly, the onset of a divorce may have the same consequences for those who exited the employment market or significantly reduced their occupational activity, as it eliminates the financial contribution of the former spouse. This effect is accentuated by the comparatively greater difficulty in reintegrating into the labour market after an interruption/reduction in occupational activity, making such individuals, for instance, more likely to accept a position that is less advantageous in terms of income and/or social protection than those they could have aspired to occupy when working continuously full-time.

#### Late Adulthood and Retirement

The income associated with an occupation is a quantifiable resource, the level of which varies according to the level of qualification, the position held and, often, the skills acquired over the years. Occupational trajectories are hence the epitome of a resource- and reserve-building process. During the period of professional activity, if the salary is sufficiently high, personal savings can be accumulated and used to buffer unexpected

expenses. However, income is also directly linked to vulnerability in the longer term, a fact that is evidenced when focusing on the transition to retirement and on whether people invested over their life course uniquely in the basic public pension fund called Old age and survivors' insurance (BASIC) or in other pension funds to complement the basic one (PLUS).<sup>1</sup> In Switzerland, the level and continuity of the contribution to one or several pension funds over the occupational life course directly determine an individual's income after her or his retirement; the higher the income was and the more uninterrupted the career, the higher the benefits. Until 1985, the PLUS option was available only to higher-level occupations,<sup>2</sup> and it is still conditioned to a minimum income per year (21,510.- in 2021).3 Using multidimensional sequence analysis, Madero-Cabib, Gauthier and Le Goff (2016) constructed six types of joint family and occupational trajectories of individuals aged between 20 and 57 in Switzerland as predictors of retirement timing (the first part of the name describes the type of occupational trajectory along with the pension type, and the second part identifies the type of family trajectory): (1) At home or Part-time and PLUS/children family (27.5%); (2) Full-time and PLUS/ children family (28.6%); (3) Full-time and BASIC/children family (16.8%); (4) Full- or Part-time and BASIC/divorced (7.7%); (5) Full-time and PLUS/divorced (7.4%); and (6) Full-time and PLUS/Single (12.0%). The results showed, on the one hand, that limited opportunities to build reserves, due to insufficient income and/or insurance benefits, hamper an early exit from the labour market and may lead to increased vulnerability in older age, particularly regarding financial security. Such limitations can be due to nonstandard, interrupted occupational trajectories associated with commitment to domestic tasks or to a pension fund restricted to the sole mandatory public pension fund (BASIC), relational scarcity (divorced or single individuals) and financial difficulties. On the other hand, standard, uninterrupted occupational (typically male) careers and high academic credentials make a late exit from the labour market less likely, allowing for the accumulation of a sufficient amount of economic resources and reserve.

<sup>&</sup>lt;sup>1</sup>For the sake of simplicity, PLUS refers here to the most widespread complementary pension fund, called the "second pillar".

 $<sup>^2\,</sup>https://www.historyofsocial security.ch/institutions/insurance-funds/pension-funds.$ 

 $<sup>^3\,</sup>https://www.bsv.admin.ch/bsv/en/home/social-insurance/bv/grundlagen-und-gesetze/grundlagen/organisation-und-finanzierung.html.$ 

# Life Trajectories and Personal Networks

Finally, taking a microsociological perspective on relationships reveals that the unfolding of life trajectories and the development of personal networks are dynamic and intertwined processes. The boundaries of a personal network change with events and transitions that occur throughout the life course (Bidart & Lavenu, 2005). While some transitions, such as becoming a parent, may direct the focus to the family of procreation (partners and children), other transitions, such as leaving the parental nest, may represent a shift away from the family of origin (parents and siblings). Using life history calendars along with network data, Aeby et al. (2019) created a typology of five family and occupation trajectories between age 20 and 40 for individuals born between 1970 and 1975: (1) Double investment (24%); (2) Family-focused (20%); (3) (Work-family) Conciliation (13%); (4) Conjugal/full-time (24%); and (5) (Work-family) Preparation (19%). They then investigated the association between those different types of trajectories and the personal networks that individuals had developed over time. The results showed that the diversity of personal networks was characterised by the provision of more or less material and emotional resources by their members and by the potential reserve that their structure provides, for instance, depending on whether they are of the bounding or of the bridging type (Aeby et al., 2019). This diversity is accounted for by trajectories that deviate from the standard type of family trajectory, characterised by a transition to parenthood followed by a long stage spent in a household composed of a couple with children. Such a network, encompassing individuals who assume different, often complementary roles, is likely to favour relational stability and to ease access to various types of resources. The solidarity principle prevalent in most families constitutes a potential reserve that may be used when facing a stressor event (Aeby & Gauthier, 2021). From this perspective, life trajectories may be considered dynamic relational structures that exert specific influence on an individual's social capital, defined as the types and amount of resources available to her through the web of her social relations. Thus, family trajectories characterised by the experience of growing up in a one- or twoparent household, leaving the parental nest early or late, cohabiting with a partner, living alone, becoming a parent, or divorcing differentially influence the development of one's relationships and the relational resources available, thereby generating vulnerability for socially isolated individuals. A similar link between trajectories and networks was found in Portugal and Lithuania (Gauthier et al., 2018). The fact that each type of trajectory is associated with specific resources and reserve acquisition opportunities underlines the key role of the broader institutional context in understanding the dynamics of vulnerability as a feature of life trajectories.

## Conclusion

The research outcomes presented in this chapter shed light on how individuals' vulnerability is structured over the life course as a process that is largely cumulative. Situating this process within a three-dimensional space (cf. Chap. 2, this volume and Spini et al., 2017) reveals patterns of vulnerability at various systemic levels (i.e., micro, meso and macro), different phases of life (youth and adulthood up to retirement) and in various life domains and their combination (e.g., family and occupation). Nonetheless, life trajectories are context dependent and are therefore sensitive to welfare regimes, economic conditions and political climate. Although globally comparable to most Western societies, Switzerland also has some structural and cultural particularities regarding, e.g., education, family policies, labour market dynamics and pension scheme availability that eventually delineate specific ways to access resources and accumulate reserves over one's lifetime. Empirical results have shown that ascribed attributes, such as sex, age and socioeconomic background, play a significant role in making individuals more or less vulnerable. On average, compared with men with similar profiles, women have lower wages and occupy less prestigious positions, more often on a part-time basis, a situation that influences their well-being. Such situations exert a direct impact on their potential resource and reserve acquisition. Age is also influential, as working during a historical period in which complementary pension funds are mandatory or not exerts a direct impact on the level of resources at retirement and on its timing. Similarly, socioeconomic background is a robust predictor of academic achievement and hence of future salary, as well as of the pension scheme associated with the pursued occupation. However, considering life courses as processes provides additional and more accurate information by considering the order and timing of life events and transitions along with the duration of the phases they delineate. While life phases are associated with specific resources and reserve opportunities, events and transitions challenge them and bring changes in one direction or another. Trajectories that deviate from standard patterns are frequently linked with a higher level of vulnerability (Widmer & Spini, 2017). This is particularly the case for women, who are more likely than men to reduce or interrupt their occupational activity and therefore to lose the advantages associated with working full time (such as income and pension levels). Other trajectories, such as educational tracks, are not only gendered but also associated with lower wages and well-being in the long term. In many situations, ascribed characteristics and processual factors are linked but may produce buffering or amplifying effects, as, for instance, in the case of a woman socialised in a more or less gendered family and/or occupational environment, of an older person having had the opportunity to contribute to a complementary pension fund, or of a lone parent having or not having inherited personal wealth and/or a dense, supportive relational network.

Thinking in terms of trajectories offers a fruitful way to examine vulnerability as it allows us to consider holistically how stressor events, resources and reserves combine and evolve over time. For instance, an occupational trajectory clearly documents the variation of the resources produced by labour market integration over an individual's lifetime, which events are associated with that variation and how this cumulative process influences the later timing of retirement. Similarly, a family trajectory reveals which relational resources are available, at which time points and for how long. The composition of the personal network at some point of the trajectories can be considered a proxy for the selection process (inclusion and/or exclusion of relational resources), and hence serves as an indicator of the type of reserve available or conceivable. Those results thus invite us to promote public policies that target critical transitions and life events (e.g., the birth of a child, a divorce, an episode of unemployment or an accident) and that are able to adjust dynamically to the specific needs of each individual at a certain point in time while giving special attention to certain categories (e.g., women, migrants, those from poorer socioeconomic backgrounds). Early intervention may prevent the onset of vulnerability processes when individuals are still of working age but also long after retirement. Finally, such a preventive approach may also contribute to lower strain on social relationships and therefore help avoid processes of social exclusion (e.g., through divorce and separation). Further research on life trajectories should aim to provide a more integrated view of the multifactor, multilevel and multidimensional dynamics underlying them by using targeted measuring instruments and by developing adequate methodological tools.

## References

- Abbott, A. (1997). Of time and space: The contemporary relevance of the Chicago School. *Social Forces*, 1149–1182.
- Aeby, G., & Gauthier, J.-A. (2021). Instrumental support exchanges among kin and non-kin in light of personal configurations. *Journal of Demographic Economics*, 1–20. https://doi.org/10.1017/dem.2021.25
- Aeby, G., Gauthier, J.-A., & Widmer, E. D. (2019). Beyond the nuclear family: Personal networks in light of work-family trajectories. *Advances in Life Course Research*, 39, 51–60.
- Aisenbrey, S., & Fasang, A. E. (2010). New life for old ideas: The "second wave" of sequence analysis bringing the "course" back into the life course. *Sociological Methods & Research*, 38(3), 420–462.
- Amato, P. R. (2010). Research on divorce: Continuing trends and new developments. *Journal of Marriage and Family*, 72(3), 650–666.
- Antonucci, L., Hamilton, M., & Roberts, S. (Eds.). (2014). Young people and social policy in Europe: Dealing with risk, inequality and precarity in times of crisis. Palgrave Macmillan UK.
- Arts, W., & Gelissen, J. (2002). Three worlds of welfare capitalism or more? A state-of-the-art report. *Journal of European Social Policy*, 12(2), 137–158.
- Beck, U., & Beck-Gernsheim, E. (2001). Individualization. Sage Publications.
- Bidart, C., & Lavenu, D. (2005). Evolutions of personal networks and life events. *Social Networks*, 27(4), 359–376.
- Bourdieu, P. (1975). Les héritiers: Les étudiants et la culture. Les Ed. de Minuit.
- Buchmann, M. C., & Kriesi, I. (2011). Transition to adulthood in Europe. *Annual Review of Sociology*, *37*, 481–503.
- Conger, K. J., & Little, W. M. (2010). Sibling Relationships During the Transition to Adulthood. *Child Development Perspectives*, 4(2), 87–94. https://doi.org/10.1111/j.1750-8606.2010.00123.x
- Cullati, S., Kliegel, M., & Widmer, E. (2018). Development of reserves over the life course and onset of vulnerability in later life. *Nature Human Behavior*, 2, 551–558. https://doi.org/10.1038/s41562-018-0395-3
- Dannefer, D. (2003). Cumulative advantage/disadvantage and the life course: Cross-fertilizing age and social science theory. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 58(6), S327–S337.
- Déchaux, J.-H. (2007). La bienveillance fraternelle et ses limites: le soutien moral entre germains adultes. *Année sociologique*, 57(1), 179–205. https://doi.org/10.3917/anso.071.0179
- De Carlo, I., & Widmer, E. D. (2011). The fabric of trust in families: inherited or achieved?. In *Families and Kinship in Contemporary Europe* (pp. 216–233). Palgrave Macmillan, London.

- Elder, G. H., Johnson, M. K., & Crosnoe, R. (2003). The emergence and development of life course theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 3–19). Kluwer.
- Gauthier, J.-A., Aeby, G., Ramos, V., & Cesnuityte, V. (2018). Linking family trajectories and personal networks. In K. Wall (Ed.), Families and personal networks an international comparative perspective (pp. 187–224). Palgrave Macmillan.
- Gauthier, J.-A., Bühlmann, F., & Blanchard, P. (2014). Introduction: Sequence analysis in 2014. In P. Blanchard, F. Bühlmann, & J.-A. Gauthier (Eds.), Advances in sequence analysis: Theory, method, applications (pp. 1–17). Springer.
- Gauthier, J.-A., & Gianettoni, L. (2013). Socialisation séquentielle et identité de genre liées à la transition de la formation professionnelle à l'emploi. *Revue suisse de sociologie*, 39(1), 33–55.
- George, L. K. (1993). Sociological perspectives on life transitions. *Annual Review of Sociology*, 19(1), 353–373.
- Gillespie, B. J., Bostean, G., & Malizia, S. (2020). Timing of departure from the parental home: Differences by immigrant generation and parents' region of origin. *Hispanic Journal of Behavioral Sciences*, 42(2), 165–190.
- Laganà, F., Chevillard, J., & Gauthier, J.-A. (2014). Socio-economic background and early post-compulsory education pathways: A comparison between natives and second-generation immigrants in Switzerland. *European Sociological Review*, 30(1), 18–34.
- Levy, R. (2013). Analysis of life courses A theoretical sketch. In R. Levy & E. D. Widmer (Eds.), Gendered life courses between standardization and individualization: A European approach applied to Switzerland (pp. 13–36). Lit Verlag.
- Levy, R., & the Pavie Team (2005). Why look at life courses in an interdisciplinary perspective? In: R., Levy, P. Ghisletta, J.-M. Le Goff, D. Spini, & E. D. Widmer (Eds). *Towards an interdisciplinary perspective on the life course*, 10, 3–32. Elsevier.
- Levy, R., Gauthier, J.-A., & Widmer, E. D. (2013). Trajectories between the family and paid work. In R. Levy & E. D. Widmer (Eds.), Gendered life courses between standardization and individualization. A European approach applied to Switzerland (pp. 71–92). LIT.
- Madero-Cabib, I., Gauthier, J.-A., & Le Goff, J.-M. (2016). The influence of interlocked employment–family trajectories on retirement timing. *Work, Aging and Retirement*, 2(1), 38–53.
- O'Rand, A. M. (2006). Stratification and the life course: Life course capital, life course risks, and social inequality. In *Handbook of aging and the social sciences* (pp. 145–162). Elsevier.
- Olson, D. H. (2000). Circumplex model of marital and family systems. *Journal of Family Therapy*, 22(2), 144–167.

- Risman, B. J. (2004). Gender as a social structure: Theory wrestling with activism. Gender & Society, 18(4), 429–450.
- Rosino, M. (2016). ABC-X model of family stress and coping. *The Wiley Blackwell Encyclopedia of Family Studies*.
- Rossignon, F., Studer, M., Gauthier, J.-A., & Le Goff, J.-M. (2018). Sequence history analysis (SHA): Estimating the effect of past trajectories on an upcoming event. In *Sequence analysis and related approaches* (pp. 83–100). Springer.
- Shanahan, M. J. (2000). Pathways to adulthood in changing societies: Variability and mechanisms in life course perspective. *Annual Review of Sociology*, 26(1), 667–692.
- Spini, D., Bernardi, L., & Oris, M. (2017). Toward a life course framework for studying vulnerability. *Research in Human Development*, 14(1), 5–25.
- Widmer, E. D., & Spini, D. (2017). Misleading norms and vulnerability in the life course: Definition and illustrations. *Research in Human Development*, 14(1), 52–67.
- Wong, J. S. (2018). Toward a theory of gendered projectivity and linked lives in the transition to adulthood. *Journal of Family Theory & Review*, 10(1), 126–140.

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