

# Studying turning points in labour market trajectories – benefits of a panel-based mixed methods design

Nicolas M Legewie, Ingrid Tucci

## ▶ To cite this version:

Nicolas M Legewie, Ingrid Tucci. Studying turning points in labour market trajectories – benefits of a panel-based mixed methods design. Longitudinal and Life Course Studies, 2021, 12 (1), pp.41-62. 10.1332/175795920X15949756176915. halshs-02915980

# HAL Id: halshs-02915980 https://shs.hal.science/halshs-02915980

Submitted on 17 Jan 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# Studying turning points in labour market trajectories – Benefits of a panel-based mixed methods design

Nicolas M. Legewie, NLegewie@diw.de German Institute for Economic Research (DIW Berlin), Germany and University of Pennsylvania, USA

Ingrid Tucci, ingrid.tucci@univ-amu.fr
Aix Marseille Univ, CNRS, LEST, France

Legewie, Nicolas M., and Ingrid Tucci. "Studying turning points in labour market trajectories—benefits of a panel-based mixed methods design." *Longitudinal and Life Course Studies* 12.1 (2021): 41-62

#### **Abstract**

Turning points describe a fundamental change of direction in a life course trajectory. However, they are challenging to study because of their temporal extension, the complexity of processes at stake during those critical life sequences, and the fact that individuals' interpretation as well as more objective changes in social status and position play important roles in turning points. Panel-based mixed methods designs are well suited to address those challenges. In-depth interview data enable researchers to understand individuals' interpretations and offer detailed understanding of the processes at stake on multiple levels and domains. The survey panel data allow a glimpse into the respondents' past through panel survey data, which can serve as a detailed resource for further case-based information. At the same time, the continuing survey data collection in prospective waves yields important data on respondents' futures that can be analysed against the background of the told history. In this paper, we draw on data from a mixed methods study on the labour market trajectories of 23 descendants of immigrants in Germany, based on the Socio-Economic Panel survey (SOEP). The aim of the paper is to show the potential of combining retrospective

interviews and panel data to account for the objective as well as subjective dimensions of turning points. Combining qualitative data and panel data does not aim at reaching the 'right' understanding of each case but at obtaining a multi-faceted picture of respondents' lives, which can help to avoid misinterpretation and under-theorization.

# Introduction

Life course research often puts high demands on data. Many phenomena of interest take place as processes over extended periods of time, which requires longitudinal data. In addition, life courses involve psychological and behavioural processes, time and life domain-related interdependencies, as well as interrelations among individual, meso and structural levels, which call for in-depth information (Bernardi et al., 2018). The study of turning points, in particular, must take this complexity into account. Turning points in labour market trajectories are characterised by changes in occupation, income, or employment status, preceded by a phase of latency in which individuals reflect on their working situation, have doubts about their future and eventually take action (Négroni, 2012), or are pushed to act due to external forces (Bidart 2006). These changes affect or are affected by events in other life domains, such as family, health or subjective wellbeing. Moreover, turning points in labour market trajectories are related to organizational contexts and dynamics, e.g. promotion criteria, firm restructuring, retraining programs or welfare conditionality (López Andreu, 2017; Patrick, 2017; Roupnel-Fuentes, 2015).

In this article, we define turning points in labour market trajectories based on three dimensions: formal criteria, subjective relevance, and involvement of multiple life domains. Formal criteria refer to changes in a trajectory regarding type of occupation, income or employment status (Bidart, 2013; Dupray and Epiphane, 2014). Subjective relevance means that individuals report a substantial impact on their life during the phase and/or construct the phase as a meaningful change retrospectively (Hareven and Masaoka, 1988). Involvement of multiple life domains means that

the change in the domain of work is instigated by or drives events and changes in other life domains, such as family, health or social identity (Grossetti, 2006).

As this definition indicates, the study of turning points requires multi-faceted and multi-level information. Retrospective qualitative interviews offer a powerful approach to studying turning points because they offer in-depth accounts of how individuals navigate meso and macro-level structures when making decisions and transitions in their lives. They also enable researchers interested in biographies to analyse how individuals reconstruct and interpret their own trajectory. However, in-depth interviews alone are limited in the analysis of turning points. First, it may be difficult to touch upon all relevant aspects of a person's life that may impact a turning point, or be impacted by it. Second, some turning points will lie years in the past, which makes it more challenging for interviewees to recall detailed sequences of changes and events. Third, one-shot qualitative interviews may reveal sequences of events and changes in respondents' lives that are ongoing and may or may not comprise a turning point. In such situations, it is impossible to know whether a turning point will actually occur in the long-term. Qualitative panel studies certainly offer one solution to this problem, but a panel-based mixed methods design provides a low-cost way to capture how interviewees' lives and potential turning points unfold in the years following qualitative interviewing.

In this article, we build on calls for mixed methods designs as ideal for studying processes in people's lives (Giele and Elder, 1998, p. 26f; Bidart, 2013; for general discussions of the strengths of complementary data, see Creswell and Plano Clark, 2011, p. 2; Harding and Seefeldt, 2013; Kuckartz, 2014, p. 53f). We emphasize the benefits of mixed methods studies that combine indepth interviews with existing large-scale, ongoing panel studies, for the fine-grained study of turning points and other long-term processes. What we suggest should not be seen as a way to obtain the 'right' understanding of each case, or to 'check' information for its veracity, but rather as a means of gaining a full multi-faceted picture of respondents' lives.

In our panel-based mixed methods research on educational and labour market trajectories of migrants' descendants in Germany<sup>1</sup>, we conducted in-depth interviews with 23 long-term respondents in the Socio-Economic Panel (SOEP; Goebel et al., 2018) and analysed their labour market trajectories with a focus on phases of change in objective and subjective terms. Our contribution is twofold. First, we show that this research design enables grasping not only detailed life sequences and how individuals experience them, but in particular the objective and subjective dimensions of turning points. In-depth interview data and panel survey data for interviewees can complement each other, but can also reveal discrepancies that are interesting from a case-analytical point of view. This might lead researchers to reconsider the strengths and weaknesses provided by findings derived from either approach on its own. Second, we show that prospective survey waves yield important information about respondents' futures, which can be essential for studying turning points and other processes in respondents' lives. To illustrate the benefits and challenges in taking both survey and interview data into account, we focus on two cases from our data set.

# Studying turning points: Challenges and propositions

Along with other concepts, such as transitions, sequences, events or crises, the concept of turning point designates important life course dynamics (Wingens et al., 2011). Despite frequent use, the definition of a turning point is far from unambiguous (Sackmann and Wingens, 2001, p. 26). Some life course researchers focus on the study of human lives using surveys to document snapshots of "objective" states such as income, as well as subjective evaluations in that moment, e.g., regarding job satisfaction. Time is treated as chronological and absolute in these studies. Others investigate

<sup>&</sup>lt;sup>1</sup> This research project was funded by the German Research Foundation (TU325/2-1 / GR3402/4-1). We thank three anonymous reviewers and the editors for their insightful comments. We would also like to thank conference audiences at ISA, ASA, SLLS, and IMISCOE, Hannes Kröger and Anne Nassauer for their helpful feedback on earlier drafts. We thank also Andrea Gensicke and Lisa Elfering who supported the data collection and analysis. Nicolas M. Legewie gratefully acknowledges funding from the Fritz Thyssen Foundation for supporting a research visit at the University of Pennsylvania in spring 2020, during which part of this article was written.

biographies and the subjective dimensions of lived experience, and treat time as a social construction (Reimer, 2014; for a discussion of life course and biographical approaches, see Gomensoro and Burgos Paredes, 2017, p. 153, see also Winogrodzka and Sarnowska in this special issue).

People's lives can be understood as sequences of events, actions and decisions. In this life course framework, turning points are seen as focal changes in a given domain, as well as the processes leading up to and following those changes. While often associated with quantitative approaches, numerous scholars have applied this perspective to qualitative or mixed methods data, to study, for instance, socio-historical influences on young people's transitions (Elder, 1974); crime and recidivism in the life course (Carlsson, 2012; Laub and Sampson, 1993; Sampson and Laub, 2005), institutional structuration of turning points (Groh-Samberg et al., 2012), the sequences of events in and drivers of turning points (Bidart, 2013, 2018) or the role of social class in transitions to adulthood (Lareau and Cox, 2011).

Biographical research is interested in lives as experienced and reconstructed by individuals. Scholars study narratives of respondents' lives, their subjective experience, interpretation, sense-making and remaking of events and their sequencing (Hummrich, 2009; Schütze, 1983). This body of work conceptualises turning points as perceived "epiphanies" (Denzin, 1989) or "fateful" and "critical moments" (Giddens, 1991; Thomson et al., 2002), as applied to such phenomena as changes in identity (Strauss, 1959), processes of reinterpreting one's past, present and future life among holocaust survivors (Rosenthal, 1995), and narrations of youth transitions to adulthood (Holland and Thomson, 2009; Thomson et al., 2002).

Both perspectives see turning points as processes over time (e.g., Abbott, 1997; Bidart, 2018; Carlsson, 2012), despite the somewhat misguided term "turning *point*." Those periods of change connect two distinct phases in life that can only be captured in retrospect, combining past, present and future. As multi-faceted phenomena, turning points are affected by and entail an interplay of individual actions, orientations and values, social networks, and social, institutional and historical

contexts (Elder, 1974; Laub and Sampson, 1993; Elder Jr. and Hareven, 1994; Bessin et al., 2009; Grossetti, 2004, 2006, 2009; Bidart, 2006; Bidart and Brochier, 2010). Turning points affect not only the life domain in which the change occurs, they are also accompanied by changes in other domains, such as health, well-being, social relations, and identity (Bidart, 2013; Carlsson, 2012; Fournier et al., 2011; Grossetti, 2006; Laub and Sampson, 1993; Négroni, 2005). Against the background of the complexity of such processes, turning points are challenging to study.

# Some challenges for research designs

Retrospective in-depth interviews offer a powerful basis for studying turning points because they provide rich accounts for narrative analysis and detailed information on processes over time, but they face two challenges when employed to study turning points.

First, because turning points are complex in their causes, inner dynamics and consequences, they require detailed information about processes and contexts, including timing of sequences and events, family and work relationships, as well as well-being, choices, and the interpretations that make sense of a given event, phase or transition (Giele and Elder, 1998, p. 26f). If a focus lies on studying sequences of states and events that may be considered objective, in-depth retrospective interviews alone may provide insufficient data because some turning points will lie years in the past, which makes it more challenging for interviewees to recall details like the sequencing of changes and events. From the biographical perspective, in-depth retrospective interviews alone may limit analytic potential because researchers may wish to complement retrospective sense-making with experiences surveyed prospectively as respondents lived them in real time, in order to capture circumstances and events that are most proximal to decision-making processes. There may be limits to how many topics can be tackled in one interview, and in some cases, the interviewer may not be aware of an important topic during the interview or might simply ask 'bad questions' (Hammersley, 2017). Interviewees might also omit (voluntarily or not) some aspects or

the changes might be too recent to have been fully processed and understood (Thomson et al., 2002).

Second, turning points can only be identified in hindsight, once enough time has passed to assess whether a new sequence has begun (Abbott, 1997, p. 95), and capturing their processual character is essential (Neale, 2019, p. 39ff). A one-shot qualitative interview may reveal a recent sequence of events and changes that have some properties of a turning point, such as a dramatic shift in occupation or income, but it is impossible to know whether this shift will be fully realized as a turning point, or will revert in the time after the interview because "an action has been taken that turns the key" *back* (Abbott, 2001, p. 257). Qualitative panel studies offer a solution to these problems and to the analysis of lived experiences. They are better suited to provide information on trajectories *and* a more complete narration. However, they require considerable resources, including time to contact and re-interview participants and to analyse the new data.

# What panel-based mixed methods designs can offer

We argue that panel-based mixed methods designs offer a viable alternative. In panel-based mixed methods designs, participants for in-depth interviews are recruited from respondents in an ongoing panel study, in a nested sequential design (Ivankova et al., 2006). Such designs have already been employed in connection with surveys, such as the SOEP (Hense, 2017), the British Cohort Study (Elliott, 2008), the British Household Panel Study (Rutherford and Bowes, 2014; Sharland et al., 2017), the Living in Ireland Survey (O'Carroll and Gray, 2010), and the Danish Longitudinal Study of Children (Østergaard and Thomson 2020). However, such panel-based designs are largely overlooked in the mixed methods literature (see, e.g., the handbooks by Creswell and Plano Clark, 2011; Kuckartz, 2014). One advantage of panel-based mixed methods designs is that statistical analyses of life course trajectories can be performed and the results used to screen groups of candidates for in-depth interviews and to guide the sampling through selective case selection strategies (Kelle and Kluge, 2010; Østergaard and Thomson, 2020). By combining survey and

interview data, researchers can obtain information about the type of trajectory and the sequence of events as well as subjective assessments of those events.

For survey-based life course studies and interview-based biographical research, panel-based mixed methods designs offer at least two benefits (Østergaard and Thomson, 2020; Sharland et al., 2017; Thompson, 2004) that help address the challenges outlined above. First, retrospective in-depth interviews and panel data promise mutual enrichment because they both focus on and provide insights about processes and turning points. Hollstein (2019) shows how biographical approaches to analysing qualitative interviews as narratives can contribute to life course research. Conversely, case-based panel data, i.e. the survey data for each case, can complement in-depth interview data by providing a prospective glimpse into respondents' past lives (e.g., the sequencing of respondents' labour market positions, partnership and family status, living and work contexts, as well as respondents' evaluations of their emotional states, world-views and wellbeing). Some work suggests that panel survey data can be used to construct narratives with an emphasis "on the temporal and processual nature rather than its interpretative or meaning making qualities" (Elliott, 2005, p. 91, 2008; Sharland et al., 2017; Singer et al., 1998). During an in-depth retrospective interview, some information, for example, about wages, can hardly be collected for every phase or each year in the interviewee's life. For biographical approaches, panel survey data offer a complementary perspective. The narration that constructs the biography, and the interpretations and experiences it contains, can be contrasted to in-the-moment assessments from the panel survey data to analyse convergence and discrepancy in "reported and experienced life history" (Hollstein, 2019). Of course, such data do not allow for rich description of participants' meaning making as in-depth interviews, but they can contribute to the analysis of biographies (Østergaard and Thomson 2020).

Second, once qualitative interviews have been conducted, and provided the panel survey is ongoing, regular data collection enables assessment of respondents' trajectories and life events following their interviews. In this sense, panel-based mixed methods designs enable the collection

of data over long periods of time (and in many cases at no additional cost to the researcher). From an "objective" life course perspective, survey data allow researchers to assess how the life of a respondent develops, and to determine whether "candidate" turning points, revealed at the time of interview, actually lead to altered trajectories, or precede a return to the prior trajectory after a period of turbulence. Repeated surveys can offer insight into changes in respondents' subjective experiences of life events and domains that are important for a biographical approach.

If the researcher's goal is to understand what turning points are made of, combining both approaches provides detailed information on sequences *and* sense-making. In this article, we present data from a mixed methods study based on the SOEP and provide examples of how this design can be employed to gain a more complete understanding of continuities and discontinuities in individual lives.

# Data, research design and methods

This article is based on a nested sequential mixed-methods design (Ivankova et al. 2006) using the German Socio-Economic Panel (SOEP) and 23 in-depth interviews with long-term SOEP respondents. The SOEP is a representative panel study of households and persons in Germany conducted yearly since 1984 (Goebel et al. 2018). In 2017, nearly 33,000 individuals aged 16 years or older were surveyed. The SOEP offers a range of content to study life courses; not only regarding labour market trajectories, family, social relations, personality, and health, but also subjective well-being and world views.

We aimed to cover a broad spectrum of respondents (Patton, 2015) taking into account three dimensions in the qualitative sampling of SOEP-respondents: labour market entry, current socio-economic position and parents' country of origin. At the same time, we narrowed the case selection to respondents aged 25 to 45 years at the time of qualitative interviews (Tucci et al. 2013), in order to ensure they grew up in a comparable time frame.

We identified patterns in early labour market entries between the ages of 18 and 25 by conducting a sequence analysis and distinguishing monthly education or training, inactivity, unemployment and employment (Legewie and Tucci, 2016). Six types of labour market entries were identified through hierarchical clustering and regrouped in four classes for selecting cases for the qualitative interviews.<sup>2</sup> To increase the pool of potential interviewees<sup>3</sup>, we had to also include some respondents who entered the SOEP more recently and participated in at least eight consecutive years in the SOEP and for whom we could use only retrospective data to reconstruct their early labour market entries (from age 18 to 25).

To determine the current socio-economic position, we used level of education based on the ISCED classification (UNESCO Institute for Statistics, 2012), income (labour wages after taxes) and type of employment (limited or unlimited contract). As the research project focuses on trajectories of migrants' descendants and on the role played by migration history and discrimination, we included only SOEP respondents whose parents had migrated from Turkey, Italy, Greece, and former Yugoslavia.

To ensure privacy, we identified pools of respondents to be contacted, in a step-by-step-fashion, by Kantar public (formerly TNS Infratest), the research services institute that collects the SOEP data yearly. Kantar public sent a letter that introduced the study and asked for consent to allow us to contact the respondent. If consent was given to Kantar, we received the contact information and contacted the respondent to set up an interview date. After the first tranche, we conducted preliminary analyses to assess what sets of respondents to contact next to cover the broadest spectrum possible on our case selection dimensions (for more details, see Legewie and Tucci 2016). In total, we completed five tranches with a pool of 193 potential respondents.<sup>4</sup> In

<sup>&</sup>lt;sup>2</sup> A detailed description of the sequence analysis is beyond the focus of this article, but is available in Tucci et al. (2013).

<sup>&</sup>lt;sup>3</sup> Despite its large overall sample, the SOEP includes relatively few descendants of immigrants who were long-term SOEP respondents before the relatively recent SOEP-IAB Migration sample (Brücker et al., 2014).

<sup>&</sup>lt;sup>4</sup> The response rate of 13% corresponds to those found in other SOEP-based studies.

addition to the retrospective employment calendar data collected for all SOEP respondents during the first panel survey interview, we could draw on at least eight years of yearly panel data for the 23 cases. As Table A1 shows (see appendix), the qualitative sample covers a fairly broad spectrum of labour market entries and current socio-economic positions; however, the data set underrepresents interviewees with lower educational degrees and more precarious labour market trajectories.<sup>5</sup>

The in-depth interviews focused on educational and labour market trajectories, as well as family and other social relations through respondents' life courses. The themes were tackled without specific order and instead allowed respondents their own rhythm and foci of attention, as typical for in-depth guided interviews (e.g., Mey and Mruck, 2010). Respondents were asked to tell their life story in whatever way they wished. After this part, we used a rudimentary life calendar<sup>6</sup>, in which respondents could fill in important events and discuss sequences or what they saw as being important and relevant (see figure A2 in the appendix). Respondents were not explicitly asked whether they had experienced any "turning points" in their lives as was done in other studies (e.g., Elder et al., 1991; Sampson and Laub, 2005). Because we want to understand both stability and change, we preferred to not prime respondents by asking about 'turning points' directly. Instead, respondents were asked to tell their life story and answer follow-up questions for clarification and elaboration after the initial response. Those questions aimed to capture aspects such as respondents' goal orientations, personal network or social context during different phases (for a full list, see Authors' own 2016). The interviews<sup>7</sup> were transcribed and coded with MaxQDA.

Thanks to the panel-based mixed methods design, we were able to draw on narrated history and at least eight years survey information for 23 respondents. The in-depth interview data provided the backbone of the case analysis, with detailed process accounts and participants'

<sup>&</sup>lt;sup>5</sup> For a more detailed discussion, see Legewie and Tucci (2016).

<sup>&</sup>lt;sup>6</sup> This calendar is less detailed than life history calendars used elsewhere (Barbeiro and Spini, 2017; Freedman et al., 1988; Porcellato et al., 2016).

<sup>&</sup>lt;sup>7</sup> Interviews were recorded and lasted between 88 and 192 minutes.

narrative constructions of their biographies and experiences of life events. The panel survey data on the 23 respondents comprised a rich complementary source of information. Based on the integration of the two types of data, we produced a series of case memos and comparative tables bringing together relevant information. In these documents, we reconstructed life courses, as well as the individual, meso, and structural level factors that impacted or accompanied them. The case analyses then informed systematic cross-case comparisons of life course dynamics, narrations and turning points (see Figure 1).

### [Figure 1 about here] - Research design

In our data set of 23 cases, we identified eleven cases with turning points in labour market trajectories, based on whether or not changes occurred in occupation (ISCO88 change at the two-digit level), employment status (e.g., from long-term unemployment to stable employment) or income (increase or decrease of 50% of one standard deviation<sup>8</sup> or more); whether those changes were relevant in the respondents' view; and whether the changes affected life domains beyond work. The analysis of those eleven cases led to the identification of different types of turning points. In the following, we discuss two cases from the set of eleven, one of which shows a completed "upward" turning point, i.e., a change that led to a better socio-economic position. The other shows a potential, but not completed "downward" turning point, i.e., a downward shift in socio-economic position. The analysis presented here is illustrative. The goal of this article is not to make substantive claims, but rather to show how the combination of qualitative interviews and case-based panel information can help researchers understand how turning points unfold.

<sup>&</sup>lt;sup>8</sup> We set this threshold following Di Tella et al. (2010).

# Analysing turning points through the combination of in-depth interview and case-based panel data

To show how fruitful it is to combine case-based panel survey data and qualitative data for the identification and the analysis of trajectories and turning points, we describe first the case of Aris. This case illustrates how variables measuring wellbeing from the panel survey provide valuable complementary information about decision-making and individual perception of life sequences. Second, we turn to Emilia's case to show how prospective survey information helps to analyse emerging or potential turning points.

## Objective and subjective dimensions of turning points and their interplay

Aris experienced a turning point towards a higher income and social status after a critical downward phase led him to quit his job in the aftermath of difficult labour relations, dissatisfaction, and health problems. He was in his early forties at the time of the interview. His parents migrated from Greece to Germany in the early 1960s. His mother stopped working when he was born and his father worked as manual worker. After finishing the lowest track of the German secondary school system as well as a one-year vocational school program focused on radio and television technology, Aris was not able to secure a vocational training position in his desired field of electronics. Instead, he started training in a trade and wound up working in a factory for a large manufacturer "because of the money," where he mostly operated machines. He stayed there for eight years.

Aris: "I did that for way too long, actually. But...it was never really my thing, and I noticed that once I started working there. But I think you just get into some kind of routine, so you say 'Okay, it's all good.' Yes. You get the money, you can get your things, cover your expenses. You're young still and want to do this and that. And...You don't really think about it. You stay in the routine. It's pretty bad. At some point you have to break out..."

 $[\ldots]$ 

**Aris:** "There was this idea of changing to something else. Or doing something else, or maybe change to another factory, where perhaps it's more... I don't know, maybe there's

more interesting stuff than just operate a machine. Or...maybe get additional training inside the company. But somehow, they pretty much blocked that. [...] I didn't get in, into these other jobs, in quality control or something."

Aris expresses dissatisfaction with the physically demanding job at the factory. He perceived it as boring, and in contrast to some other cases in our data set, his attempts to get further training within the company did not bear fruit; in Aris's view due to a "kind of favouritism". Nonetheless, Aris did not take action to do something else. Rather, he contemplated going to work in a different factory where "maybe there's more interesting stuff than just operate a machine." The main reasons for not leaving, according to him, were a routine he fell into and his steady income. In this period, Aris recounts his wife trying to motivate him to find other work but his orientation towards a good standard of living prevailed:

Aris: "She had always said that: Look for something else. Look for anything, other options.' But I was just too fixated in the money."

A look at Aris's panel survey data from his time at the factory helps us to understand Aris's trajectory, and provides an interesting juxtaposition to Aris's narration of this phase. Figure 2 shows Aris's global and work satisfaction during his time at the factory as collected yearly in the survey. We see that despite some minor volatility over time, Aris consistently noted high satisfaction both with life in general and with his job during this time. The high satisfaction level Aris reported in the panel survey may have played a role in Aris's decision to stay at the factory for eight years. From a biographical perspective, the qualitative interview shows how respondents narrate their lives as a result of decisions and social interactions. Aris's working situation was in a sense in line with his wish to afford a good standard of living and leaving his job might have been too risky.

<sup>&</sup>lt;sup>9</sup> Satisfaction is measured on a 0-10 scale.

The juxtaposition of Aris's account of his dissatisfaction in his old job, the survey data for the period (Figure 2) and his retrospective declaration about his overall life satisfaction after the qualitative interview (Figure 3) indicates that yearly standardized measurements of life satisfaction and retrospective evaluations in qualitative interviews do not measure the same thing. Notwithstanding the fact that questions about satisfaction are susceptible to mood effects, such as those induced by good weather or a lottery winning ticket (Krueger and Schkade, 2008), contrasting retrospective and survey results furthers our understanding of decision-making processes. Moreover, combining the two sources of data suggests further questions about narrations (Hollstein, 2019). In Aris's case, we may ask: Was he unaware of being unhappy while he was still working at the factory and has he now adjusted his narration after re-evaluating this phase of his life? Is the narration in the in-depth interview a rationalization of why it was good that he left his job?

[Figure 2 about here] -Satisfaction during initial labour market trajectory - Aris<sup>10</sup>

[Figure 3 about here] – Retrospective life satisfaction - Aris

A health crisis in the form of a herniated disk finally leads to a shift in Aris's labour market trajectory.

**Aris:** "Until, yeah, until you mess up your back. That was it, I said 'now it's time to go. [...] You can't go on in your old job.' That's what the doctors said: 'Forget it.' Because at my job, working with metal, you gotta throw stuff around sometimes. [...] So I had to make sacrifices and do something different [...]. And so that's how it started."

These doubts, dissatisfaction and uncertainty about whether he may yet continue in his old job preceded a phase of search for new opportunities in which Aris's social relations were of particular importance.

<sup>10</sup> The following R packages were used for the creation of the figures: tidyverse, extrafont and haven.

Aris: "My girl-friend, or now my wife, she put a lot of pressure on me. She said: 'Come on, now. Do something. Look around.' She helped me a lot in the search, too. [...] And when my injury happened, she said: 'Come on, now's the time.' So yeah, she really supported me. [...] 'We'll start looking, we'll do this, we'll do that. There's something out there.' So she really helped me out.

Aris ascribes a key role to his wife in establishing a job change as a possibility even before his health problems occurred. In his eyes, his wife led him later to realise that his injury could be seen as an opportunity to re-orient his professional career, providing him support in carrying out the change. From a biographical perspective, this passage comprises an interesting aspect of Aris's narration because he ascribes key agency in his job change to his wife, instead of to his own decisions. From a life course perspective, this points to the crucial role of social ties in turning point processes (see Bidart, 2013; Laub and Sampson, 1993). Aris was unemployed for two years after quitting his job and during the interview he emphasized repeatedly that it was highly important to him to have a dependable income and be able to afford things. He described a long period of looking for the right fit in re-training programs to achieve his goals, and an extended battle with the employment agency to grant him access to the re-training program he desired. Taken together, it seems plausible that without his wife's support Aris may have opted for a shorter, more secure route back into the labour market that would have returned him to the occupational level he occupied before his injury. He was finally admitted to a two-and-a-half-year re-training program as an IT systems administrator, a job in a field he says he had always been drawn to ("The rest was more or less something to kill time"). He was then able to secure an internship and find a job in his field of training.

Drawing on Aris's panel data offers important analytic insights. Figure 4 shows Aris's income and satisfaction with work between 18 and 46 years of age. Aris had a consistent labour income through his work at the factory after finishing his vocational training (age 20) until he quitted his job at age 30. After years of unemployment, he first received relatively low income during his retraining and internship. But this phase also helped to restore Aris's self-image and status vis-à-vis

his wife, who was finishing her university degree in economics at the same time. Aris stresses repeatedly that he found some content of his re-training so similar to his wife's studies that he feels he could have gone to university too ("I said, Oh, that's what she's doing at university. I can come to your classes, then.").

#### [Figure 4 about here] - Time series of income and satisfaction with work - Aris

Income and occupational data from the panel survey provide objective turning point dimensions in Aris's labour market trajectory. His new job at age 40 was not only situated in an entirely new field of work, it also brought him a substantial increase in prestige and pay. As Figure 4 shows, according to his answers in the panel survey, Aris's satisfaction with work is lower during his re-training than while at his factory job. It rises to the same pre-change level once Aris settles into his new job, but falls again substantially<sup>11</sup> at age 39. For this period, the panel data and the narrative tell a different story. The subjective evaluation measured in the panel survey does not coincide with the increase in occupational status and income and is also contrary to Aris's ex-post narrative during the in-depth interview.

An even closer look at the panel survey data from the years after the in-depth interview can give some insights into the contrasting evaluations and the counterintuitive development of Aris's income level and work satisfaction. Asked in the 2017 survey whether he thinks that his current net income is fair considering the type of work he does, Aris reported that his income was "unjustly low." He expected a net income 70% higher than what he received at that time. Looking at another set of questions concerning changes in technologies and production processes at the workplace, we also learn that he expects in the next two years an increase in the demand for qualification, for

1

<sup>&</sup>lt;sup>11</sup> As orientation, according to Fujita and Diener (2005), 2.2 scale units is the mean value in the whole SOEP population for respondents experiencing a significant change on satisfaction when comparing the averages over two five-year periods. On the link between life events and change in satisfaction see, e.g., Lucas et al. (2004).

work performance, and work productivity, as well as an increase in the risk of losing his job. Evaluating retrospectively Aris's overall satisfaction at the end of the qualitative interview, he sees the phase in his old factory job in a more positive light (see Figure 3) and declares "Maybe I just remember the good stuff." This point shows that a panel-based mixed methods approach provides rich information on how certain life events and life experiences converge or diverge, and how retrospective narrations can suggest a different picture than evaluations "in-the-moment". Divergences are interesting because they show that either source is not a "gold standard." Panel survey data provide repeated snapshots of life states (e.g., on income and employment status) that leave little room for respondents' interpretation, as well as evaluative questions that enable researchers to link objective events or states with how respondents' think and feel at time t. In both cases, the data is produced mainly from the researcher's perspective and stored in the form of variables. Biographical interviews, in contrast, enable respondents to explain experiences at length and re-interpret and evaluate them in the light of current circumstances, past and subsequent events, as well as future expectations. Observed divergences between both data types underline how important it is to integrate absolute and relative time to study life courses (for an extended discussion of this issue, see the article by Sánchez-Mira and Bernardi in this special issue).

Aris's case illustrates how in-depth interview and case-centred panel data provide researchers with a rich basis for reconstructing labour market trajectories from an "objective" life course perspective, and adds complementary insights about in-the-moment experiences and evaluations from a biographical perspective. Some of the information given by variables from surveys about subjective wellbeing and detailed life events illuminate decision-making processes surrounding reported life events and lived experiences (Hollstein, 2019). Hence, combining survey data and interview data is challenging when there are divergences between both data types, but it adds to our understanding of turning points and related processes and phases.

# The elucidating potential of prospective panel data

Of the eleven respondents in our data set that showed a turning point, several described a change to the interviewer that was still ongoing and presented a "too close to call"-scenario because the change may not prove to be lasting. The panel survey data collected in the years following in-depth interviews provides information that allows us to assess how such candidate turning points evolved. Here again, some subjective variables related to satisfaction indicate how perceptions and experiences may have changed or remained stable in the time since the in-depth interview.

Some candidate turning points played out differently than could be expected, as the exemplary case of Emilia shows. Emilia was 34 years old when we interviewed her. Her parents migrated from Italy and worked for decades in a factory before it went bankrupt. Emilia graduated from a lowest-track secondary school and entered a vocational training position in the health sector. After finishing her training, she worked for several years in this job, enjoying her work and environment. However, when the business was restructured Emilia was let go. After six months of unemployment, she earned the taxi certificate and became a taxi driver instead of waiting for a job in her field of training and "doing nothing".

In the taxi company, Emilia encountered grim working conditions ("that was an absolute low point"). To escape this environment, she took on an unskilled temporary job. She liked the work, but her contract was not renewed. Again, in order to avoid unemployment, she returned to the taxi company, where work conditions were even worse.

"Well, it was never less than twelve, thirteen hours a day. [...] I drove a taxi until noon, and in the afternoon, I did the phone service and talked to the health insurance companies, because we transported a lot of patients and I did all that administrative stuff, book keeping, planning the routes. I kind of was doing two jobs at once, and so eventually that took its toll. [...] It was tough, really tough."

During this time, Emilia suffered a mental and physical breakdown. In addition to her high work load, Emilia had a critical event in this period. Her father died and her accounts suggest that

she foregrounds the tough work conditions as reason for her breakdown, while her father's death may also have played an important role. Emilia recalls the subsequent phase as follows:

"And then in September came the big bang. [...] At the beginning I would feel sick in the stomach and throw up, feel dizzy and stuff like that, and then have these episodes of micro sleep; everything above 20, 30 kilometres, it was really hard to stay awake. [...] And then in September I went to rehab for the first time, and was fired right away. [...] So you lie in bed wide awake, but you're not even able to go to the toilet, so that's really..."

Emilia's labour market trajectory took a downward swing when she was let go from her first job. Since then, she has been in low-paying jobs with problematic working conditions, on fixed-term contracts, unemployed or out of the labour market due to physical and mental health issues. Emilia's troubles continued during her re-training. She described developing an allergy to materials she would be in contact with in her new field of work. Hence, at the time of the interview, it seemed unclear whether she would be able to work in that field, and whether her mental health would recover enough to allow her to work at all. Emilia herself voiced such scepticism repeatedly throughout the interview ("It's difficult right now, very difficult."), but also described plans to improve her employment situation.

The prospective panel data at first remain in line with the downward candidate turning point: Emilia is unemployed through 2016, at which point she had been out of the labour market for five years, including her time in re-training. However, in 2017 her situation changes. According to the panel, she found a permanent position in the health sector of her previous training with a net income well above her prior income levels and she reports higher work satisfaction than before (see Figure 5). While her life satisfaction remains low and stable after the qualitative interview, her health satisfaction increases substantially, indicating the importance of considering various indicators of well-being to assess the respondents' subjective life situation.

#### [Figure 5 about here] - Times series for income and satisfaction with work - Emilia

In contrast to Emilia, other cases do not display a similar pattern of recovery after a downward turn in labour market trajectories; instead, the downward turn solidified in the years after the interview. Hence, prospective panel data is key in determining the further development of candidate turning points in labour market trajectories. It also affords ways to analyse the (non)realization of plans and wishes respondents might have expressed during the qualitative interview.

# Discussion

Life courses and biographies unfold over time and involve interdependencies between behavioural processes, contexts and life domains. This is even more true in the case of turning points, a sequence of changes and events that lead to a fundamental shift in trajectory and bear salient meaning for individuals. As this article aims to show, panel-based mixed methods research designs offer great potential for the study of turning points, both from a life course and a biographical perspective. They allow accounting for the nexus between analytic (life course) and interpretative (biographical) aspects inherent to the making of lives.

Combining and juxtaposing panel data and qualitative interviews for case analyses of turning points gives researchers access to fine-grained information on each case. Using such combined data, we were able to analyse fundamental aspects of life courses: events and transitions during respondents' lives, their social relationships, the social contexts they moved in, their values, world-views and perceptions, satisfaction and wellbeing (Gielde and Elder 1998: 26-27). We are aware that variables from surveys reflect primarily the researchers' priorities, but nonetheless they constitute a valuable supplementary point of entry into the respondents' lives (Sharland et al. 2017). While the narration produced in qualitative interviews represents the subjective assessment of certain phases of life in light of the past, subsequent experiences, current circumstances and

aspirations, our approach shows also that panel survey variables measuring, e.g., domain satisfaction, value orientations or expectations, indicate how respondents assessed their lives at that moment in the past, and what possibly drove their satisfaction and their (in)action at that moment.

Combining qualitative data and panel data does not aim at reaching the 'right' understanding of each case but enables a more fine-grained picture of respondents' lives. This fuller picture is, of course, not an end in itself. It can help, for instance, to avoid under-theorization of such complex processes as turning points. As we illustrated with Aris's case, the high level of satisfaction reported in the panel survey as he was still in his old job is an interesting piece in the puzzle of his turning point: he did not take action to find a more satisfying job but a critical event had to occur, functioning as a catalyst for his decision to quit his job. Individuals, in a certain phase, refrain from taking action, voluntarily or not, and it is crucial to understand decision-making as much as non-decision-making to reach a better understanding of life course processes. Panel variables measuring changes in subjective aspects can further our understanding of decision-making, and a lack of change can also have explanatory potential.

We also showed how prospective panel data can help to determine the further development of what are often 'candidate' turning points at the time of an in-depth interview, i.e. processes that seem to herald a turning point, but may yet develop in a different direction. In our data set, some of these candidates became turning points, with the respondents stabilizing at a later time in a new sequence in terms of occupation, labour market status and/or income. Others, however, experienced an unexpected reversion. Emilia's case illustrates well the importance of prospective survey-based data to examine the stabilization of a new sequence. Together with other cases showing such reversions in our data set, Emilia's case questions irreversibility as a key characteristic of turning points (Grossetti 2006). This irreversibility depends on the available observation time, since researchers are hardly ever able to tell 'the whole story.' As a result, long-term research designs help to avoid misinterpretation of life sequences.

Ideally, it would be beneficial to add depth to the prospective survey-based analysis of turning points. As we have argued in this article, turning points involve individuals' reinterpretation of their lives and panel survey data cannot illuminate this process in detail. Repeated qualitative interviews in a panel-based mixed methods design can yield enticing analytic prospects, since the qualitative approach would enable "contextualizing actions and identifying the degree of agency that individuals may exercise" (Verd and López Andreu, 2011, p. 58). In a panel-based mixed methods design, the standardized survey data could also be used to structure subsequent qualitative interviews (Heinz, 2003, p. 86). However, this kind of design is challenging: the respondent burden in answering a long yearly questionnaire and the fatigue produced by repeated in-depth interviews could potentially yield more superficial interviews and engender panel attrition. Despite such difficulties, linking panel survey data and repeated qualitative interviews to study a specific life domain would be an innovative and fruitful approach that could open new avenues for future research, offer greater insights in the study of biographical and life course processes, and reduce the extant quantitative / qualitative divide.

# References

- Abbott, A. (1997) 'On the concept of turning point', Comparative Social Research, 16, 85-106.
- Abbott, A. (2001) Time Matters: On Theory and Method, Chicago: University of Chicago Press.
- Barbeiro, A., and Spini, D. (2017) 'Calendar interviewing: A mixed methods device for a biographical approach to migration', *Qualitative Research in Psychology*, 14(1): 81-107.
- Bernardi, L., Huinink, J., and Settersten, R. A. (2018) 'The life course cube: A tool for studying lives', *Advances in Life Course Research 41*, 100258.
- Bessin, M., Bidart, C., and Grossetti, M. (eds) (2009) Bifurcations. Les sciences sociales face aux ruptures et à l'événement, Paris: La Découverte.
- Bidart, C. (2006) 'Crises, décisions et temporalités: Autour des bifurcations biographiques', *Cahiers internationaux de sociologie*, 120, 29-57.
- Bidart, C. (2013) 'What does time imply? The contribution of longitudinal methods to the analysis of the life course', *Time and Society*, 22(2): 254-273.
- Bidart, C. (2018) 'How plans change: Anticipation, interferences and unpredictabilities', *Advances in Life Course Research*, 41, 100254.
- Bidart, C., and Brochier, D. (2010) 'Les bifurcations comme changements d'orientation dans un processus', in A. Mendez (Ed.), *Processus: Concepts et méthode pour l'analyse temporelle en Sciences Sociales*, Academia Bruylant. pp. 171-190. https://halshs.archives-ouvertes.fr/halshs-00490426

- Brücker, H., Kroh, M., Bartsch, S., Goebel, J., Kühne, S., Liebau, E., Trübswetter, P., Tucci, I., and Schupp, J. (2014)

  The new IAB-SOEP migration sample: An introduction into the methodology and the contents. SOEP Survey Papers: Series C, Data Documentations, 216, 1-59.
- Carlsson, C. (2012) 'Using 'turning points' to understand processes of change in offending: Notes from a Swedish study on life courses and crime', *British Journal of Criminology*, 52(1): 1-16.
- Creswell, J. W., and Plano Clark, V. L. (2011) Designing and Conducting Mixed Methods Research (Second Edition) SAGE Publications, Inc.
- Creswell, J. W., and Plano Clark, V. L. (2017) Designing and conducting mixed methods research (Third Edition). SAGE.
- Denzin, N. K. (1989) Interpretive biography. Sage.
- Dupray, A., and Epiphane, D. (2014) 'Traitements qualitatifs et quantitatifs de données de questionnaire Le cas des bifurcations professionnelles', *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique*, 124(1): 14-33.
- Elder, G. H. (1974) Children of the depression: Social change in life experience. Chicago: University Of Chicago Press.
- Elder, G. H., Gimbel, C., and Ivie, R. (1991) 'Turning points in life: The case of military service and war', *Military Psychology*, 3(4): 215-231.
- Elder Jr., G. H., and Hareven, T. K. (1994) 'Rising above life's disadvantage: From the Great Depression to war', in G. H. Elder, J. Modell, and R. D. Parke (eds), *Children in time and place: Developmental and historical insights* Cambridge University Press. pp. 47-72.
- Elliott, J. (2005) Using narrative in social research: Qualitative and quantitative approaches. New-York: Sage.
- Elliott, J. (2008) 'The narrative potential of the British Birth Cohort Studies', Qualitative Research, 8(3): 411-421.
- Fournier, G., Zimmermann, H., and Gauthier, C. (2011) 'Instable career paths among workers 45 and over: Insight gained from long-term career trajectories', *Journal of Aging Studies*, 25(3): 316-327.
- Freedman, D., Thornton, A., Camburn, D., Alwin, D., and Young-DeMarco, L. (1988) 'The life history calendar: A technique for collecting retrospective data', *Sociological Methodology*, 18, 37-68.
- Fujita, F., and Diener, E. (2005) 'Life Satisfaction Set Point: Stability and Change', *Journal of Personality and Social Psychology*, 88(1): 158-164.
- Giddens, A. (1991) Modernity and self-identity: Self and society in the Late Modern Age. Stanford: Stanford University Press.
- Giele, J. Z., and Elder, G. H. (eds) (1998) Methods of life course research: Qualitative and quantitative approaches. New York: Sage.
- Goebel, J., Grabka, M. M., Liebig, S., Kroh, M., Richter, D., Schröder, C., and Schupp, J. (2018) The German Socio-Economic Panel (SOEP). *Jahrbücher Für Nationalökonomie Und Statistik*.
- Gomensoro, A., and Burgos Paredes, R. (2017) 'Combining In-Depth Biographical Interviews with the LIVES History Calendar in Studying the Life Course of Children of Immigrants', in C. Bolzman, L. Bernardi, and J.-M. Le Goff (eds.), Situating Children of Migrants across Borders and Origins (Vol. 7, pp. 151–171). Springer Netherlands.
- Groh-Samberg, O., Jossin, A., Keller, C., and Tucci, I. (2012) 'Biografische Drift und zweite Chance', KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie, Sonderband: Soziologische Bildungsforschung, 186–210.
- Grossetti, M. (2004) Sociologie de l'imprévisible. Paris: Presses Universitaires de France.
- Grossetti, M. (2006) 'L'imprévisibilité dans les parcours sociaux'. Cahiers internationaux de sociologie, 120, 5-28.
- Grossetti, M. (2009) 'Imprévisibilités et irréversibilités: Les composantes des bifurcations', in C. Bidart, M. Grossetti, and M. Bessin (eds), *Bifurcations. Les sciences sociales face aux ruptures et a` l'événement*, La Découverte. pp. 147–159
- Hammersley, M. (2017) 'Interview data: A qualified defence against the radical critique', *Qualitative Research*, 17(2): 173-186.
- Harding, D. J., and Seefeldt, K. S. (2013) 'Mixed Methods and Causal Analysis', in L. S. Morgan (Ed.), *Handbook of Causal Analysis for Social Research*, Springer Netherlands. pp. 91–110.
- Hareven, T. K., and Masaoka, K. (1988) 'Turning points and transitions: Perceptions of the life course', *Journal of Family History*, 13(1): 271—89.
- Heinz, W. R. (2003) 'Combining methods in life-course research: A mixed blessing', in W. R. Heinz and M. Victor W. (eds), *Social Dynamics of the Life Course. Transitions, Institutions, and Interrelations*, Aldine de Gruyter. pp. 73–90.
- Hense, A. (2017) 'Sequentielles Mixed-Methods-Sampling: Wie quantitative Sekundärdaten qualitative Stichprobenpläne und theoretisches Sampling unterstützen können', KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie, 69(S2): 237–259.

- Holland, J., and Thomson, R. (2009) 'Gaining Perspective on Choice and Fate: Revisiting critical moments', *European Societies*, 11(3): 451-469.
- Hollstein, B. (2019) 'What autobiographical narratives tell us about the life course. Contributions of qualitative sequential analytical methods', *Advances in Life Course Research*, 41, 100248.
- Hummrich, M. (2009) Bildungserfolg und Migration: Biografien junger Frauen in der Einwanderungsgesellschaft. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Ivankova, N. V., Creswell, J. W., and Stick, S. L. (2006) 'Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice', *Field Methods*, 18(1): 3-20.
- Kelle, U., and Kluge, S. (2010) Vom Einzelfall zum Typus: Fallvergleich und Fallkontrastierung in der qualitativen Sozialforschung (Second edition). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Krueger, A. B., and Schkade, D. A. (2008) 'The reliability of subjective well-being measures', *Journal of Public Economics*, 92(8–9): 1833-1845.
- Kuckartz, U. (2014) Mixed Methods: Methodologie, Forschungsdesigns und Analyseverfahren, Wiesbaden: Springer.
- Lareau, A., and Cox, A. (2011) 'Social class and the transition to adulthood', in M. J. Carlson and P. England (eds), Social Class and Changing Families in an Unequal America. Stanford: Stanford University Press. pp. 134-164.
- Laub, J. H., and Sampson, R. J. (1993) 'Turning Points in the Life Course: Why Change Matters to the Study of Crime', *Criminology*, *31*(3): 301-325.
- Legewie, N. M., and Tucci, I. (2016) Panel-Basierte Mixed-Methods-Studien (Panel-Based Mixed Methods Research). SOEPpapers 871.
- López Andreu, M. (2017) 'All precarious? Institutional change and turning points in labour market trajectories in Spain: Insights from narrative biographies', *Employee Relations*, 39(3): 408-422.
- Lucas, R. E., Clark, A. E., Georgellis, Y., and Diener, E. (2004) 'Unemployment Alters the Set Point for Life Satisfaction', *Psychological Science*, 15(1): 8–13.
- Mey, G., and Mruck, K. (2010) 'Interviews', in G. Mey and K. Mruck (eds), *Handbuch Qualitative Forschung in der Psychologie*, VS Verlag für Sozialwissenschaften. pp. 423-435.
- Neale, B. (2019) What is qualitative longitudinal research? London, New York: Bloomsbury Publishing.
- Négroni, C. (2005) 'La reconversion professionnelle volontaire: D'une bifurcation professionnelle à une bifurcation biographique', *Cabiers internationaux de sociologie*, 119(2): 311-331.
- Négroni, C. (2012) 'Turning points in the life course: A narrative concept in professional bifurcations', in K. B. Hackstaff, F. Kupferberg, and C. Négroni (eds), *Biography and turning points in Europe and America*, Bristol: Policy Press. pp. 41–63.
- O'Carroll, A., and Gray, J. (2010) A Life History and Mixed Methods approach to examining Turning Points as the Intersection between Biography and History (NIRSA) Working Paper Series. No. 58. NIRSA Working Paper Series. 58.
- Østergaard, J., and Thomson, R. (2020) 'Thinking through cases: Articulating variable and narrative logics on a longitudinal analysis of drug use and school drop out', *International Journal of Social Research Methodology*, 23(4): 423-436.
- Patrick, R. (2017) For whose benefit? The everyday realities of welfare reform. Bristol, Chicago: Policy Press
- Patton, M. Q. (2015) Qualitative research and evaluation methods: Integrating theory and practice (Fourth edition). New York: Sage.
- Porcellato, L., Carmichael, F., and Hulme, C. (2016) 'Using occupational history calendars to capture lengthy and complex working lives: A mixed method approach with older people', *International Journal of Social Research Methodology*, 19(3): 269-286.
- Reimer, D. (2014) Subjective and objective dimensions of turning points. Social Work & Society, 12(1).
- Rosenthal, G. (1995) Erlebte und erzählte Lebensgeschichte: Gestalt und Struktur biographischer Selbstbeschreibungen, Frankfurt: Campus Verlag.
- Roupnel-Fuentes, M. (2015) Les chômeurs de Moulinex, Paris: Presses universitaires de France.
- Rutherford, A., and Bowes, A. (2014) Networks of Informal Caring: A Mixed Methods Approach. *Canadian Journal on Aging*, 33(4): 473-487.
- Sackmann, R., and Wingens, M. (2001) Theoretische Konzepte des Lebenslaufs: Übergang, Sequenz und Verlauf. In R. Sackmann and M. Wingens (eds), *Strukturen des Lebenslaufs: Übergang—Sequenz—Verlauf*. Beltz Juventa. pp. 17–50.

- Sampson, R. J., and Laub, J. H. (2005) A Life-Course View of the Development of Crime. *The ANNALS of the American Academy of Political and Social Science*, 602(1): 12-45.
- Schütze, F. (1983) 'Biographieforschung und narratives Interview', Neue Praxis, 13(3): 283-293.
- Sharland, E., Holland, P., Henderson, M., Zhang, M. L., Cheung, S. Y., and Scourfield, J. (2017) 'Assembling life history narratives from quantitative longitudinal panel data: What's the story for families using social work?', *International Journal of Social Research Methodology*, 20(6): 667-679.
- Singer, B., Ryff, C. D., Carr, D., and Magee, W. J. (1998) 'Linking Life Histories and Mental Health: A Person-Centered Strategy', *Sociological Methodology*, 28(1): 1-51.
- Strauss, A. L. (1959) Mirrors and Masks: The search for identity. The Free Press.
- Thompson, P. (2004) 'Researching family and social mobility with two eyes: Some experiences of the interaction between qualitative and quantitative data', *International Journal of Social Research Methodology*, 7(3): 237-257.
- Thomson, R., Bell, R., Holland, J., Henderson, S., McGrellis, S., and Sharpe, S. (2002) 'Critical Moments: Choice, Chance and Opportunity in Young People's Narratives of Transition', *Sociology*, 36(2): 335-354.
- Tucci, I., Jossin, A., Keller, C., and Groh-Samberg, O. (2013) 'Labor market entry of descendants of immigrants in France and Germany: A comparative analysis', Revue française de sociologie, 54(3): 567-596.
- UNESCO Institute for Statistics. (2012) International Standard Classification of Education (ISCED) 2011. UNESCO Institute for Statistics.
- Verd, J. M., and López Andreu, M. (2011) 'The Rewards of a Qualitative Approach to Life-Course Research. The Example of the Effects of Social Protection Policies on Career Paths', Forum Qualitative Social forschung / Forum: Qualitative Social Research, 12(3).
- Wingens, M., Valk, H. de, Windzio, M., and Aybek, C. (2011) 'The sociological life course approach and research on migration and integration', in M. Wingens, M. Windzio, H. de Valk, and C. Aybek (eds), *A Life-Course Perspective on Migration and Integration*. Springer.

Figure 1: Research Design

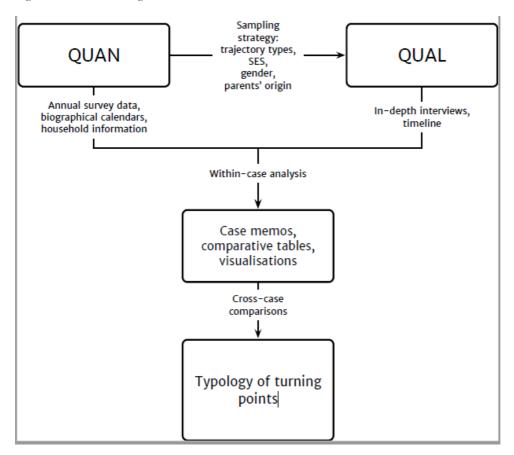


Figure 2: Initial labour market trajectory Aris

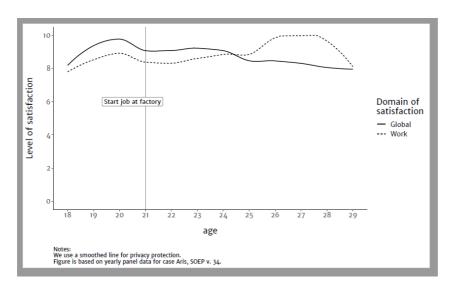


Figure 3 Retrospective life satisfaction Aris

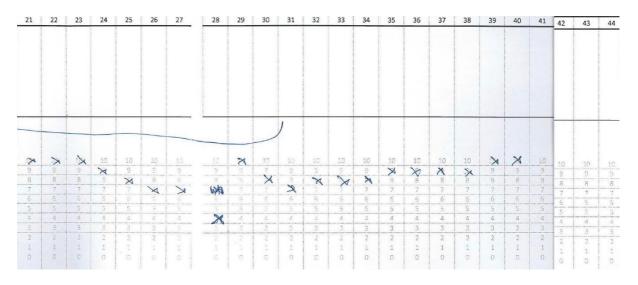


Figure 4: Time series 18 to 46 Aris

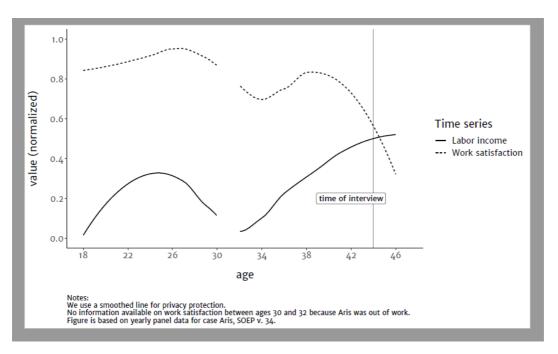
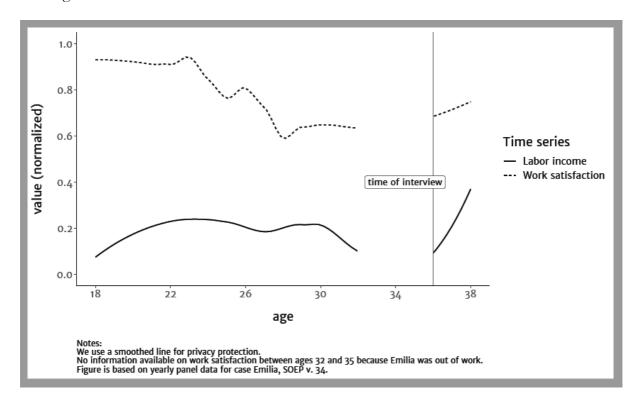


Figure 5: Time series Emilia



Appendix A1: Type of early labour market trajectories and current SES (qualitative sample)

Early trajectory (18-25)	C	Total		
	Low	Medium	High	
Inactivity	0	0	1	1
Precarious	3	5	1	11
Stable	0	8	0	8
University	2	3	0	5
Total	5	16	2	23

<sup>\*</sup> Current SES: combination education level, work contract and personal income.

Appendix A2 Simplified life calendar

ppendix AZ simplified in							_					_	_						_	_	_		
General																							General
Work																							Work
Year								_															Year
Age	0	1	2	3	- 4	5	6	_	32	33	34	35	36	37	38	39	40	41	42	43	44	45	Age
School																							School
ally satisfied with life in general (10)	30																						Fully satisfied with life i general (10)
9	9	9	9	9	9	9	9		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
8					8	8	9		9					8	9	8					9		8
7	7																						7
6	6	6	6	6	6	6	6		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
5	5																						5
4	-4	4	4	4	4	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
3	3				3	3	3					3	3										3
2	2																						2
1	1																						1
otally dissatisfied with life in general (0)	0																						Totally dissatisfied wit life in general (0)