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What does time imply?

The contribution of longitudinal methods

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Abstract :

Longitudinal panel methods are particularly suited to studying the life course as a process. They make it possible to compare different moments in time, to analyze the intervals and to identify "ways of moving". Such an approach reveals turning points and helps to identify the relevant objective and subjective elements and driving forces that help to shape life transitions. These elements and rhythms are embedded in diverse life spheres, networks and social frames. The ways in which they interact, evolve and synchronize with each other are particularly crucial for young people. Based upon a longitudinal panel survey of young French people, this methodological discussion provides an original insight into processes of socialization.

Keywords: longitudinal methods, process, temporalities, youth transitions

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Relevant disciplines: sociology, demography, anthropology

Life course research is increasingly incorporating the dimension of time into its analyses, particularly through the use of the concept of "career" (Hughes, 1937 ; Becker, 1963, 1998 ; Conninck & Godard, 1990; Passeron, 1990). This concept suggests that, at any given moment, the conditions and direction of each point of a trajectory can be redefined, with new resources or constraints appearing and leading to a change of direction. Social scientists may go even further and consider a life course as a process. That is, they can improve their theory and the methods used to capture the complexity of social phenomenon by including the dynamics that shape them. Such a perspective would make it possible to understand not only the observed facts and positions, but also the various elements, sequences of events, driving forces and bifurcations that have led an individual to a particular state at a specific moment in time (Mendez, 2010).

Youth is a particularly rich period of the life course for observing transitions from one situation to another, as well as analyzing changes in the links between the biographical and social components, the overlapping of different social spheres,

personal transformations and the social policies that seek to manage young people's integration into the labour market and the wider society. Social scientists have described these transitions from childhood to adulthood, as well as some of the changes they have gone though over time: lengthening, desynchronization, increased complexity and diversification (Galland, 1991). While analysts previously worked on identifying "thresholds" that were relatively synchronic and would cumulatively lead a young individual to become an adult (leaving school and beginning to work, leaving the parental home and setting up home with a partner, having a baby), they now observe that these stages have become dissociated and reversible (Evans & Furlong 2000, Furlong & Cartmel 2007). The "temporalization of life" is a characteristic of modernity (Rosa, 2010). This has prompted social scientists to reconsider the relevance of these thresholds, particularly by placing these trajectories within their specific social contexts (Bidart, 2006b, Leccardi & Ruspini, 2006, Cavalli, Cicchelli & Galland, 2008, Van de Velde, 2008). However, by developping more appropriate research methods, greater attention can be paid to the dynamic dimension of these transitions. In that respect, longitudinal surveys prove to be particularly relevant, especially for sociology and criminology (Sampson & Laub, 1993).

A process is a series of stages or phases in progress or transformation. It takes time. It may be divided into sequences, each one being a specific combination of relevant elements derived from the context. It includes driving forces that generate movement. It is likely to undergo changes of direction. Thus to examine a process is to examine the ways in which things evolve. In investigating life processes, sociologists may include in their analyses the elements or ingredients involved, the way they are combined in sequences, the dynamics of the context itself and, among these elements, the driving

forces underlying movement, as well as bifurcations and, finally, the links between all these dimensions (Mendez, 2010).

In this paper I propose to consider the life course transitions of young adults as processes. This implies changes of methodological and theoretical perspective, such as the use of longitudinal methods, a focus on turning points rather than on continuity, the identification of driving forces, the consideration of subjective as well as objective changes, multidimensional analysis and the inclusion of social networks as a dimension possibly influencing individual trajectories. Some examples are given of the benefits of such an approach for an understanding of young people's transitions.

Methods

Participants :

A cohort of young people who were living in Caen, in Normandy (France), were contacted for the first wave of a qualitative longitudinal survey[1]. The sampling criteria were gender and course of study. At this time, they were in the senior year of general high school or vocational high school or taking part in various labour market integration programmes; each of these 3 groups contained more or less even numbers of boys and girls. The survey started just before a turning point for them, namely taking the *baccalauréat* or reaching the end of a training course. They were then aged between 17 and 23. They were first contacted at school; the sample was made up of pupils from

[1] This survey was funded by the Basse-Normandie Regional Department of Health and Social Affairs (DRASS), the Calvados Regional Department of Health and Social Affairs, the Basse-Normandie Regional Department of Employment and Vocational Training, the Town Council of Caen, the Interministerial Commission on the Integration of Young People, France-Télécom R&D, and the National Family Allowance Office (CNAF).

For further information on this survey, go to: http://halshs.archives-ouvertes.fr/halshs-00164797

separate classes in order to avoid groups. The face-to-face questionnaires and interviews were conducted in their homes.

Survey waves	Year	Nb persons interviewed
Wave 1	1995	87
Wave 2	1998	74
Wave 3	2001	66
Wave 4	2004	60
Wave 5	2007	55

They were re-interviewed every 3 years, the interviewer sometimes travelling abroad to meet those who had moved (Boston, Oslo, Valencia, Rome).

Procedures and materials :

First, factual biographical details were recorded on standardised questionnaires and calendars outlining their trajectories over the three years since the previous wave of the survey, focusing on education, training and employment but also on family, home, leisure activities etc. (Bidart, 2006c).

Personal networks were constructed using a specific 'contextual name generator' tool (Bidart & Charbonneau, 2011). It was designed as follows: after asking one or two quick questions about all the possible contexts (more than 50 were proposed), they were asked:

‘In (name of context – e.g. work), who are the people you know a little better, with whom you talk a bit more?’

The answers to these questions were used to single out the individuals (Alter) in a given context who were identified personally by the respondent (Ego). The questions were repeated for each context. The list of first names generated in this way provides the basis for constructing the personal network. Then information sheets were compiled on those network members and on the characteristics of the relationships between Ego

and Alter. At the end, the names were placed around a circle and the respondent was asked to draw lines representing the connections between the Alters who, according to him/her, knew each other in order to measure the density of the network.

Once the interviews had been completed, the interviewer compared the factual data on trajectory and network with the information gathered 3 years previously.

A few days after, semi-structured interviews were conducted and taped. Respondents constructed narratives, offered explanations for the biographical and relational changes that had happened between the waves of the survey and discussed various matters of opinion.

Because of the multiplicity of spheres that were tackled, the interviews lasted between four and ten hours and were usually conducted over several meetings held several days apart.

These interviews were transcribed and archived using Microsoft Word and indexed and processed with Nvivo 7 software. The factual biographical and relational data were coded and archived with Excel, then processed with SPSS, particularly the statistical materials about the 10,804 dyadic relationships that were documented, all of this composing a “mixed methods” original design (Bidart & Cacciuttolo, 2012). Network data were computed with Pajek.

Longitudinal methods, time and process

Longitudinal research is based on the idea that time has effects that cannot be correctly identified when reconstituted *a posteriori*. Longitudinal methods, both quantitative and qualitative, have the advantage of unfolding in real time. Collecting data at different stages of the life course enables researchers at least partially to avoid

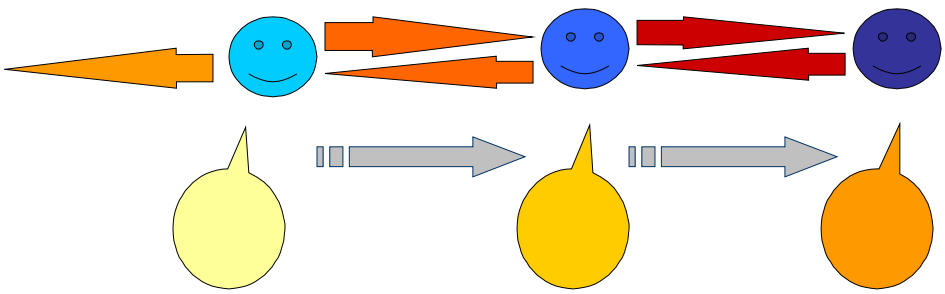
flattening out or guiding social phenomena towards a start or end point, that is towards an initial impulse or the final assessment an actor may produce during an interview (Bourdieu, 1986; Demazière, 2003). Indeed, the historicity of contexts and positions, deficiencies of memory and anticipation and a desire for coherence on the part of both interviewee and interviewer are all factors that help to "polish" and distort narratives. Repeating interviews with the same persons at different moments in time makes it possible to compile separate datasets for each wave, representing different and comparable "presents". The times at which interviews are carried out may correspond to specific life-course stages or may be arbitrary in relation to them[2]. Furthermore, the points at which data are collected may constitute "markers" (moments A and B) on either side of a segment of time and help people remember, objectify or correct an imprecise memory or a subjective reconstruction. Thus, in contrast to studies that adopt a purely retrospective approach, each moment of a longitudinal study takes place in the "real" present, in which the individual and his or her context are synchronous.

The researcher then compares the data from the different waves and looks for differences: if an individual moved from point A to point B, the differences between A and B indicate that some change took place in the period between the two data collection dates (e.g. graduation, getting a job, marriage, loss or gain of income and so on). However, the researcher also compares the answers given to specific questions about the intervals between the survey waves : What happened? What were the "hard times", the "good times" for you during this period? What are your plans for the coming years? Do you consider yourself an adult? Why or why not? And so on. All these questions are repeated every three years. The researcher thus conducts an exercise in

[2] In this case, the first wave of data was collected just before the respondents took the high school exam (*baccalauréat)* that allows individuals to enrol in French universities. Subsequent waves were carried out arbitrarily at three-year intervals from the first one.

retrospection that is more reliable than one that seeks to cover a whole life at once, since the human memory is better at remembering a recent, delimited period of time than at giving an account of a whole existence. In the same way, he asks about the respondent's expectations and plans in the short and medium term rather than the distant future. In this way, he can compare the present with the past and with future plans. More specifically, the present at a given point in time can be compared with the present at another point in time, the same being possible with the past and the future. In this respect, time offers a "continuously changing point of reference" (Blossfeld 1996, p.182). A sort of "triangulation" is made possible by this multiple time perspective, just as a navigator makes use of space. The heuristic potential of longitudinal surveys proves to be very considerable indeed (Ruspini, 1999).

Comparison of the answers given at different points in time reveals changes that need to be examined very closely. The analyst may thus compare several intervals, with different "ways of moving" and sequences marked out by separate presents, and then reconstruct processes. As he can now separate out these dimensions, he is able to identify discrepancies, dissonances and discontinuities. Longitudinal survey designs also make it possible to identify long-term trends and socially structured patterns behind biographical turning points and critical moments (Henderson et al., 2007, Holland & Thomson, 2009). In this way, longitudinal methods help to break up the supposed linearity of the life course (Abbott, 2001).



For example, an initial comparison of the stages in the life of Alban, one of the young people in this panel, revealed different steps. He was finishing high school at the time of the first wave of data collection. In the second wave three years later, he was studying business. In the third wave he was selling photocopiers, while in the fourth wave he was studying to become a dentist, as he was in the fifth one as well. Comparisons between the first three waves of data collection may seem relatively "normal", but the latter stage is more surprising. It will be of little use for a researcher to simply note this change. In order to understand Alban's life course, the last shift in particular, the researcher would have to know what happened between the third and fourth waves of data collection. Asking Alban what happened between these moments will allow the researcher to fill in the gap between these two situations (photocopier salesman and dental student).

This can be done in two ways :

- by describing and dating the most "objective" events and situations through the use of life course calendars that highlight the developments within that interval;

- by recording the way in which the individual tells his story and the representations he has of his own life course, seeking to identify events, "hard times", turning points, etc.

Researchers are increasingly mixing these methods in order to analyze the disparities between subjective and objective times, as well as the rhythm, intensity and varying density of the temporalities (Elias, 1991, Battagliola et al., 1991, Sewell, 1996, Leclerc-Olive, 1997, Lasen 2001, Antoine & Lelièvre, 2006). In this way, the researcher records Alban's progression month by month during the intervals between the survey waves; he also follows Alban's accounts over time, comparing the two sets of

information in order to identify the various logics driving developments. For example, Alban was initially aiming just to find a job quickly and earn some money. In a second phase, he had found a job and was feeling satisfied, but he rapidly became disappointed and then his old dream of being a dentist re-emerged. The researcher will ask him to explain, interpret and justify the changes he observes. He will seek to uncover key moments of hesitation, decision-making and turning points. Although studies of trajectories aim to describe the subsequent situations of individuals in order to compare their positions and evolutions, our objective is also to understand why and how these individuals are in one place and not another. When individuals found themselves at a crossroads with several opportunities open to them, how did their life take a particular course at a time when it could have taken another?

Orientations and turning points

Our main question then is: how is a trajectory constructed ? Certainly, it is constructed over the long term, with its various logics, legacies, resources, obstacles, contexts and networks. It unfolds over long time scales, which may be characterised by a certain inertia. However, a life course is also constructed during key moments that may be more or less unpredictable (Grossetti, 2005, Bessin, Bidart & Grossetti, 2010), and particularly when young individuals stand at a crossroads facing a number of different possibilities and having to go through a decision-making process (Bidart 2006a).

The future of individuals is often decided at these turning points: institutionalized crossroads such as passing the *baccalauréat*, as well as unforeseen crossroads, such as a layoff or an accident. Their decisions have long-term effects on their life course and can

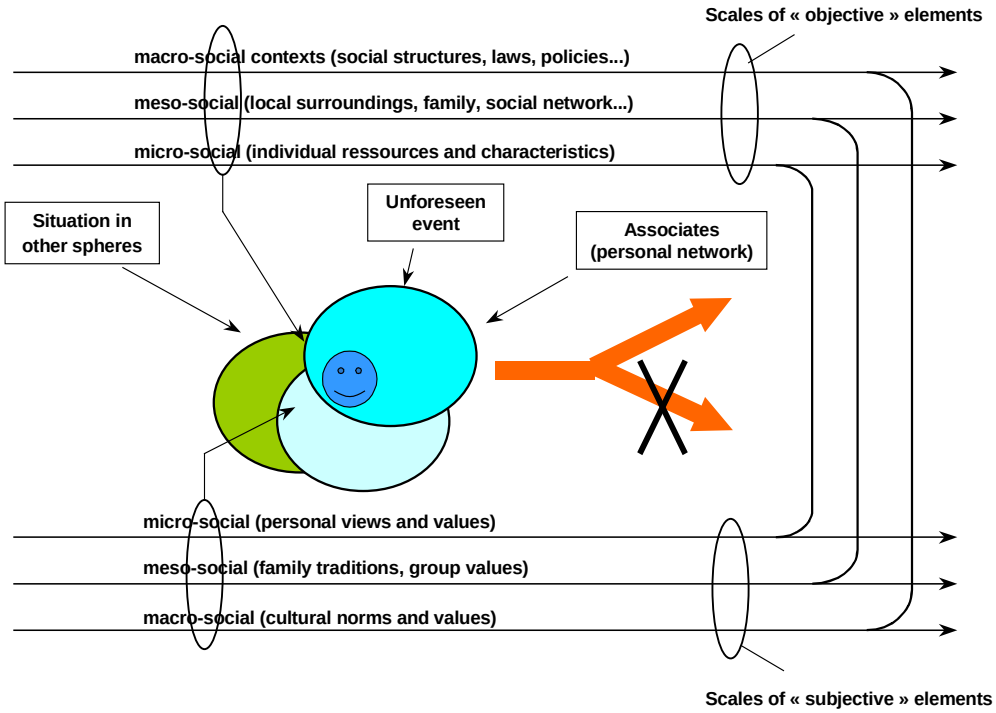
also influence other spheres of life by “contamination”, making these decisions irreversible for the most part (Grossetti, 2006). As entering adulthood is in itself a period of intense change, with assets being reallocated and expectations adjusted in a short space of time, it may be advantageous to focus on the moments when these young individuals reach a crossroads and are forced to make decisions (Elder, 1985).

Within this framework, the researcher seeks to identify the elements or “ingredients” that shape these bifurcations. Some of these may be located in the background; they may be long-term and large-scale, while others may come into play only at specific moments. While the respondent evaluates his alternatives, the researcher is able to identify priorities, triggering elements, relevant events, links between spheres and ways of facing different contexts, managing obstacles and exploiting resources, on a continuum between fate and agency (Thomson et al., 2002). He then writes up a list of elements and describes their use and the links between them during this crucial time.

For example, examining the interval between waves 3 and 4 for Alban, we discovered that he had experienced a “hard time” due to the intensity of his work. He went through a crisis that left him disappointed in his job. Furthermore, the financial security this job had given him allowed him to reconsider an old childhood dream, long abandoned, of becoming a dentist. Then he weighed up the “pros and cons”. On the one hand, he had a job that enabled him to make a living but which “oppressed” him. As a child, he had dreamed of becoming a dentist but had found it impossible since his divorced parents were unable to support him financially. Now he was better off in terms of work and resources, felt relieved about it and had managed to save up some money. On the other hand, in order to become a dentist he would need to go through a long

training period during which he would be likely to face financial trouble. He might even need to move back in with his mother in order to save up on rent. But then, he would have a prestigious occupation that he previously thought inaccessible. “It’s now or never, I will not have another chance”, he said, being at the time single and without commitments. These and other ingredients contributed to the formation of a unique configuration of elements in this sequence.

The general pattern of biographical bifurcations may be represented as follows.



A bifurcation is characterised by a relatively high concentration of changes, compared with the preceding and subsequent sequences. This brief period of intense change has long-term consequences. Bifurcations are also characterized by

unpredictability (in terms of norms or flows). They are generally revealed by a certain event, which either triggers or resolves a crisis by opening up a possible way out. New alternatives become available, requiring decisions to be made, as when one is standing at a crossroads. This uncertainty gives rise to a period of intense reflection, analysis of the alternatives and weighing up of the relevant elements and priorities, all of which contribute to a recombination of the logics governing action. This frequently implies a radical reorientation of individuals' lives. Its effects are felt in many different spheres of life, which contributes to its irreversibility. For example, when Alban moved to his mother's home after leaving his job, it became more and more difficult for him to go back on his decision.

Career changes, like that performed by Alban, are not so rare. In France, statistical surveys have shown them to be increasing in number. About a third of young people report such changes during their first 7 years of working lives (Legay & Marchal, 2007). While one worker out of eight who remained employed between 1980 and 1985 changed socio-occupational category, one out of five did so between 1998 and 2003 (Monso, 2006).

A meticulous study of these key moments can provide us with a variety of data that help us understand what shapes these bifurcations and reorientations in terms of contexts, constraints, resources and their linking into sequences. Thus the investigation of turning points reveals its heuristic potential: it is easier to identify the factors driving change than those responsible for continuities. This enhances our understanding of the general components and dynamics of life course processes and helps to identify the forces animating them.

Driving Forces

What are people looking for? What drives them to action? What generates movement in their life processes? The notion of driving force seeks to answer such questions. The relation to work is an example of such a driving force: why does one work? What meanings are given to work? (Bidart & Longo, 2007). A driving force also evolves over time and these shifts are revealed through longitudinal data.

A longitudinal survey makes it possible to compare different "presents", and when it involves at least three waves of data collection it also offers an opportunity to compare intervals, movements and "ways of moving". This is an important step, as it makes it possible to compare sequences of a process. We can thus observe whether or not priorities have evolved, whether orientations that defined a life course have been modified at one point or another or whether the driving force has changed. Identifying these logics and driving forces will reveal the principles that impel individuals to act.

For example, why does Alban work? What dimension of his work is motivating him? In the first waves of our survey, his main objective was to make money — the money he did not have as a child. The most important aspect of work for him "is the salary", as he said during the second wave. Similarly, during the third wave, he said that "working is making money, making a living to get some stability, to enable me to have hobbies." In the fourth wave, work for him became a matter of "recognition from others" when you have a "prestigious" job, but also a mission: "I think that taking care of other people's health is the most beautiful job on earth. When one is in pain, someone who saves him from it is like a god".

Thus the "driving force" for Alban's actions and choices in the professional sphere changed in this last period, when he left his sales job to become a dentist. It was

probably necessary for him to be reassured about his own ability to make money before he could “allow himself” to make his dream come true, before the second driving force could take over from the first one.

Other young people have different relations to work that evolve in the opposite sense: some will exchange an initial period of passion for a second one in which earning money takes priority, while others, after experiencing strong commitment in a previous job, will seek a modest, peaceful and stable position.

This is where we can really see the concept of process at work: the logics driving action evolve during the action, the configuration of relevant elements is modified, the driving force also changes, and the researcher seeks to consider these movements without limiting the analysis to a description of stages. Each wave of the panel reveals an evolution of objective states, but it also unveils transformations in individuals’ perspectives and priorities. Sometimes the researcher even collects different accounts of the same event, as the actor reconsiders his past and future during each of the survey waves. These accounts can also be interesting material for comparison.

During this time, contexts also change, as landscapes evolve and grow “older”. Moreover, contexts themselves are shaped and reshaped by individuals, as flows of actions deepen, reinforce or reorient the trends. This effect echoes the economic notion of path dependency: the path is modified with each passing, its attractiveness is transformed and, more generally, each action contributes to the evolution of the elements of a context. Thus we will seek to identify the effects of a given context, but also its use and the effects of that use.

Objective Dynamics, Subjective Dynamics

Studies are generally enhanced when they also take into account the subjective dimension of a process; this is particularly the case for research on “becoming an adult”. This question is often envisioned in its most objective or at least objectified aspects, for example by establishing an age range for crossing thresholds that are considered significant for the achievement of adult status. However, the subjective part of the term “adult” is at least as important as the “objective” one, because the actual substance of what exactly it means to become an adult is unclear and unstable — although this may remain unquestioned in everyday conversations. It is very difficult to identify clearly and unambiguously the point at which one becomes an adult. Age is of course a factor, but there is no direct relation between age and the various aspects of adulthood. Different spheres of life shape this outcome (getting a job, becoming autonomous, leaving one’s parents to live on one’s own, starting a family) but do not determine it entirely and are increasingly desynchronized and reversible. Given the increasing vagueness that surrounds the transitions towards adulthood, it is becoming more and more interesting to study this transition as a subjective matter rather than an objective biographical threshold.

We thus asked our panel the following question: “Do you consider yourself an adult? Why?”. We discovered some surprising results and identified some changes in the answers from one survey wave to another.

Most answers were mixed: these young people consider themselves adults in some respects but not in others, and with some people but not with others. The answers themselves are not as important to us as the arguments used to justify them. These latter enable us to identify individual logics, as well as to discuss the relevance of certain “thresholds” and their persistence over time. We are not disqualifying thresholds as devoid of sociological meaning: having a child, for example, is definitely relevant to

becoming an adult, as it constitutes a move from one generation to the next. Nevertheless, some young parents do not consider themselves adults and thus the transition is not absolute. In addition, other thresholds of very diverse kinds were also mentioned, some very much based on emotions and interactions.

Comparison over time reveals the ways in which young people modify their position towards adulthood as well as the evolution of their arguments and perceptions of what in fact "makes" a person become an adult (Bidart, 2005). Here again, it is easier and more illuminating to analyze this phenomenon in the perspective of change rather than permanence: time reveals the relevant traits (as for all comparisons) but also dissociates certain factors from each other, disentangles them and, as already noted, reveals diverse "ways of moving", of gradually becoming an adult, for example.

The researcher then tries to break this process down into its various sequences, elements and driving forces. Such a processual analysis avoids focusing solely on the point of departure (the prospect of becoming an adult), on the point of arrival (being an adult) or on a reconstruction of the trajectory from the point of arrival (having become an adult). It makes it possible to compare series of statements that were all made in the present, to evaluate the differences between them and to measure the impact of actual experiences on any possible changes of opinion about adulthood. Then the analyst seeks to understand how experiences and representations are linked in these changes.

For example, Cathy stated at the time of the second survey wave: "I am not an adult, I will be when I have a child". Three years later, at the time of the third survey wave, she had a child. Thus we could extend Cathy's own statement about what constitutes adulthood as expressed at the time of the second wave and conclude that she was now an adult. However, at the time of the third wave Cathy told us: "I am not an adult, having a child made me a mother, not an adult". She had now experienced what

she previously thought was necessary to accomplish her representation of adulthood, but in the meantime, either her representation of adulthood, of herself or of both had changed. She still did not see herself as an adult, albeit for other reasons. We discovered that Cathy had a very negative idea about the adult world and did not want to be part of it. This feeling must be taken into consideration: an aversion towards adulthood, or conversely for other young people the frustration of not being considered an adult, leads individuals to make choices and take action. Some young people fear this process and seek to postpone it, while others forge ahead in order not to be left behind. This demonstrates how representations can shape practices and trajectories. The process of preference formation interacts with individuals' actions and is strongly time-structured (Blossfeld 1996, Blossfeld *et al*. 1999).

Comparison over time also enabled us to identify individuals who considered themselves adults in the second wave but not in the third, those who had somehow "turned back the clock". Sometimes "objective" situations contribute to this shift, for example leaving a partner and finding oneself single again and returning to an adolescent way of life. Most often, however, what we see is like a mirage: the threshold is clear when seen from afar, but the more one approaches it, the fuzzier it becomes. From afar, grand categorizations and overarching cultural models define representations of adulthood. For example, for someone who is much younger, it is "obvious" that one should marry before turning 25. However, as one comes closer to that age, reality reveals complications and details that were previously invisible and the way one sees oneself changes as well. With time and experience, representations and arguments become sharper. Other shifts occur in relation to the distance between the self and

adulthood: arguments change and so does the logic that links them together. Things become even more complicated when we consider multiple temporalities.

Time's arrow and multiple temporalities

The elements, driving forces and temporalities not only vary over time for any one individual but also take a diversity of forms at any given moment. After all, individuals inhabit several spheres of life simultaneously and are therefore tuned to the different rhythms and logics of action that characterised those various spheres. They take on different roles depending on the context and its rhythms, logics, norms and social frames.

Nevertheless, these roles are not completely isolated and may overlap and be combined at any given moment in any one individual. For example, an individual who is very professional in his office might bring some of that behaviour back home; another might be an activist in union meetings and may carry over that experience to his hobbies or married life. Discordance between these roles also exists: a person may be courageous with his family and a coward at work, another may be honest in her political commitments but not with her partner. These dissonances sometimes become apparent when social circles overlap.

There is also multiplicity within each sphere. For example, a sort of twin-track course sometimes emerges with regard to career plans, with one plan being developped in parallel with another, or one remaining latent and emerging at a later time. For example, Alban's dream of becoming a dentist was buried as he worked as a salesman, but it later re-emerged and put into practice. Someone might also simultaneously want a stable job for one reason and fear it for another; or one might consider oneself both an

adult and not, or want one thing and its opposite. Is this so rare? The notion of the "plural self" is relevant here, where an individual is endowed with multiple dispositions that may or may not be activated depending on contexts, events, moments and acquaintances. That is, human beings are simultaneously and not only successively multiple (Lahire, 1998).

Here again, this can have important shaping effects upon trajectories. Depending on the field or life sphere, a person may progress differently, at different rates and on the basis of different logics, even though these elements are in constant communication and can mutually contaminate each other by extending a sort of halo of influence over each other (Abbott, 2001). For some analysts, the arrow of time itself is not as unambiguous as it might seem: the past shapes the present and the future, but the opposite is also true. Indeed, expectations, plans and goals influence the present and reinterpret the past. Without actually calling into question fully the arrow of time, we can nevertheless seek to complete and enhance it with other dimensions.

Any given point of a trajectory located on this arrow of time can conceivably be subject to the influence of other temporalities. As an individual talks and thinks, both his memory and his ability to anticipate the future shape his present. Memories and expectations are brought up to date and insert little subjective arrows of time pointing towards the past and future respectively. They re-interpret the past, formulate the future and become embedded and involved as constitutive elements of decision-making in the construction of a trajectory (Giddens 1991).

Different spheres of life also, each with its particular rhythms and timetables, also coexist at the same point on a given trajectory. An individual can be both "ahead" in the professional arena and "behind" in terms of their family life (or vice versa) compared with cultural norms. If the analyst seeks to understand the links between these

temporalities, he will soon notice that these spheres and temporalities interact with each other: a love story will affect a career, a relocation may delay a plan to have a child, and so on. These "contaminations" between spheres are partially responsible for the irreversibility of a trajectory, since it will be harder for an individual to reverse a decision that has had consequences in several spheres of life (Grossetti, 2005). This multiplicity of 'clocks' includes different dimensions of time, different spheres of the life course and the objective and subjective interactions between them (Courgeau & Lelièvre 1992, Mills 2000, Oechsle & Geissler 2003).

From this perspective, we can see biographical sequences as something other than one-dimensional thresholds that are crossed from one day to the next. These thresholds do not signify by themselves that one has "passed" from one state to another; turning points may have more implications for an individual than simply switching from one track to another. Furthermore, the present is not the only dimension of time to be considered; others times are embedded in it and may become relevant at any given moment, as other spheres and dimensions intervene and influence the decisions that make up a trajectory.

Contexts and Networks

The temporalities we have mentioned are not strictly individual; they interact and are constructed in relation to environments, social frames (Halbwachs, 1952) and contexts. First, the individual is in contact with his environment, and particularly the relations and different acquaintances that form his social network. This network gives a picture of the individual's socialization, of the "small worlds" he may reach through his relations to friends, colleagues, neighbours, parents, sports partners, etc. The extension,

diversity and structure of the network are all indicators of the multiplicity of social circles that can be accessed and the various facets an individual may have. If his network is concentrated in one arena, one neighbourhood, one profession or one period of time, the individual will be fully integrated within it but will have few other alternatives. If his network is scattered across different arenas, social milieus and age groups, he will benefit from more heterogeneous set of resources and identifications. He may, for example, feel more adult with some parts of this network than with others. As young people experience life transitions and events, their network also evolves (Bidart & Lavenu, 2005).

This observation is particularly relevant if we consider that what pushes an individual towards adulthood or what pulls him back towards childhood is mainly other members of his environment who offer their example or advice (Bernardi 2004). Friends and influent acquaintances may be considered as “significant others”. Parents are obviously also important and have a great influence on the process that leads an individual to consider himself an adult. In the case of Emeline, her transition lies in her parents’ eyes : “I cannot consider myself an adult because my parents do not make me feel like one. My mother will always consider me her idiot and immature daughter.”

These significant others are even more important in turning points when their advice becomes even more crucial, given that routines are collapsing and individuals find themselves in a more fragile position. In such cases, one can perceive more easily the forces that social surrounding exerts over a trajectory. However, a diverse network will most likely produce contrasted advice and a number of possible courses of action, as opinions are intrinsically co-produced in relationships (Ferrand 2011). In our study, the contradictions did not seem to bother individuals, as they sought multiple opinions and models to help them move forward. The structure of their networks, particularly the

density of interconnections between its members, influences the coherence or conversely the heterogeneity of the alternatives it proposes. Our data show that networks tend to become less dense as young people become adults, which implies increasing “opacity”, diversity of influences and autonomy for their choices (Bidart, 2008).

Moreover, each of these models and identity references cannot be considered as purely individual or as the product of only one group of friends, one local social circle or one family. They are products of more general socialization processes. The diverse influences, models and temporalities are framed not only by immediate contexts and networks, but also by broader cultural and global references. For example, the idea that one should get married before turning 25 is widely shared in France, even if it is slowly changing. Similarly, members of some social categories share the idea that one should live on one’s own before getting married, while this is far from being the norm among others. Temporalities and biographical timetables are socially and culturally determined, as is revealed by studies comparing and contrasting transitions towards adulthood in Northern and Southern Europe (Corijn & Klijzing 2001, Nazio & Blossfeld 2003, Bidart 2006b, Elchardus & Smits 2006, Cavalli, Cicchelli & Galland 2008, Van de Velde 2008). These diverse temporal frames come from political institutions, previous cohorts, social groups, firms, family, religion and social policies (Leccardi 1996, 2005, Vrancken & Thomsin 2008, Scherger 2009). Macro-social contexts are thus also significant in determining trajectories. These social temporalities also evolve throughout history. Time period and generational effects can be observed in the divergences between parents and their children with regards to perceptions of work or starting a family, for example.

Conclusion

We are now able to surround time's arrow with a number of embedded temporalities whose effects extend beyond those of the different spheres of life or the various facets of an individual's social roles; these temporalities are rooted in our societies and our cultures. Longitudinal methods make it possible to break up different dimensions of time, to identify different presents, to compare situations and representations at different moments, to reconstruct the interval between them and to identify "ways of moving". This kind of analysis proves to be sharp enough to clarify complex realities and cautious enough not to flatten out the time dimension. It gives us the ability to really talk about about "process".

Combining perspectives and building a kind of triangulation from a variety of different points in time reveals the importance of dissonances and bifurcations in the life course. Bifurcations are particularly heuristic, since they reveal the relevant elements that contribute to decision-making and the construction of a career. The "driving force" of the action creates movement and generates a career dynamic. For example, it is the relationship to work that gives young people entering professional life their commitment and expectations. It is likely to change with experience and turning points.

The longitudinal perspective also clarifies the link between practice and representations and between objective and subjective elements in the shaping of a life course. Facts and ideas may follow different paths and different rhythms, their disjunctions and evolutions being more visible with repeated interviews. The plurality of temporalities situated in diverse life spheres (work, leisure, family life…) are partly interactive and combined, as people do not completely separate their social roles from each other. The "plural self" results from this combination, which is also revealed in the

form and structure of the individual's network. The relationships with different kinds of other people, having diverse opinions and influences on one's orientations, contribute to the plurality and to the dynamics of the person's construction in relation to the social world. These processes of socialization are particularly active during the time when young people leave their family and school when becoming adults. Longitudinal methods show their relevance to the study of such processes.

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