
General presentation

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Event history analysis is a demographic technique used for quantitative research in the social sciences. A specific feature of the event-history approach is the introduction of the time factor into the analysis: individual and collective time, changes in society and in historical eras. From birth to death, individuals experience a range of demographic events: parenthood, marriage, changes of residence etc.

As observation methods improve and questions become more specific, the trajectories recorded become more detailed. Researchers are confronted by complex sociodemographic events, but also by changes of state which are not simply marked by a specific event, since a transition from one state to another may take the form of a process not necessarily associated with a single date. The life-event histories of individuals recorded in the form of a continuous sequence of diverse events (GRAB, 1999) are the result of interactions between these events. Transition is seen increasingly as a process spread over time, no longer fixed in a single instant, and event history surveys shed light on this complex reality. This creates a paradox for event history demographers: defining an event by means of a single date is over-simplistic, yet how can we capture the various intermediate stages, the fuzzy threshold between two situations, whereby the individual shifts from a “start” status to an “end” status?

This problem can arise even in standard demographic events (births, deaths). Though the birth of a child is marked by the moment of delivery and its date of birth, its existence as an individual depends upon religious and personal attitudes, with some people believing that the person already exists *in utero*. With progress in medicine and life support technologies, there is heated debate about the status of patients in a vegetative state, and the transition from life to death is no longer as instantaneous as once believed.

These are extreme illustrations of situations frequently encountered by the GRAB researchers, in which no distinct, unique markers of transition could be recorded. For example, the period of pregnancy precedes the birth of a child. This period, which stretches from the day the pregnancy becomes

known to the day the child is born, varies greatly in length from one woman to another depending on her age, experience, family environment, level of education, etc. And the period of “anticipation” may even precede conception. Entry into union takes different forms in different societies and covers a period of varying length: engagement, dowry payment, cohabitation, religious or civil marriage ceremony, etc. The choice of potential markers is therefore wide. In the study of mobility, certain surveys no longer simply record residential changes, but the entire “residential system” of respondents over a given period to better capture residential and occupational turbulence (GRAB, 1999). Lastly, when the transition studied, such as entry into adult life, results from a combination of changes in a variety of areas, the problems of defining event markers become especially acute, to the point where researchers may question the utility of an approach whereby only a limited sub-population is recognized as adult. This is indeed a conceptual problem: can we say that a young man aged 28, with no steady job, no partner and living in the family home has not yet reached adulthood? This problem is combined with a measurement difficulty: what are we observing? What information should we collect, and for what purpose?

The development of questioning aiming to collect quantitative data on trajectories provides an innovative means to observe these periods in more detail. What have been the outcomes of this development – its advances and its limitations? What do interviews reveal about the perception of these transitions by individuals and their contact circle? What lessons can be learnt to improve the understanding of these transitions? The question of the treatment of fuzzy time in the analysis models is then raised. Beyond duration models, what approaches should we attempt, via what type of observation?

With the aim of addressing these questions, the *Groupe de Réflexion sur l'Approche Biographique* (GRAB) working group brought together around 30 researchers from a range of disciplines in November 2003 to take part in three study workshops organized jointly by CEPED, INED (“event history and multilevel analysis” methodological unit) and IRD (UR 47-DIAL).

Picking up on the key questions debated in the workshops, a number of groups were set up around particular thematic and/or methodological aspects, each with the task of producing a chapter of this book. These groups worked together using an innovative system of collaboration, often between distant geographical locations and different disciplinary standpoints, to address these questions through a collective endeavour. Such exercises are extremely rare in the social sciences: there are few successful examples of collective capitalization of ideas produced through more personal research, or specific to a small team. In fact, despite the very varied range of fields and topics, the texts produced display a remarkable degree of consistency, testifying to the pertinence and the value of the exercise. The book thus comprises six thematic chapters with collective authorship.

Chapter 1 covers the topic of data collection and of how to deal with respondents' perceptions, both in general and in relation to their life-event history in particular. This key question, mentioned again in the following chapters,

is central to the analysis of fuzzy states. Chapter 2 demonstrates the importance of capturing the entire process leading from union to disunion, institutional time being distinct, moreover, from relational time. Chapter 3 covers the question of sexuality and fertility via two specific examples: unwanted pregnancies in France and prevention of mother-to-child HIV transmission in Côte d'Ivoire. On the basis of these two case studies, the authors examine the temporal aspects of relations between sexual partners/parent partners. Chapter 4 addresses fuzzy states via the complex notion of *hébergement* (being housed). Taking account of the transitions described earlier, Chapter 5 examines the pertinence of markers and the existence of founding events in the transition to adulthood. Chapter 6 deals with the question of individual mobility in relation to the context in which it occurs, introducing a necessarily multilevel approach.

This book targets a much broader audience than the community of demographers: it concerns all social scientists who, at one moment or another, need to collect data in the field, to undertake a critical assessment of the data obtained, of the analysis categories, of the event history timeframe, and of the gradual or complex transitions observed. Fortunately, individuals do not remain frozen in a single state throughout their life. Analysis of the diversity of states experienced (residential, occupational, conjugal and familial) raises new questions about the social categories used by social scientists. Throughout this book we invite readers to rethink these concepts and categories.

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What is fuzzy: the time, the event or the state?

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Fuzzy time

Collecting life-event histories involves recording scenarios in which certain sequences may move forward too quickly or where the chain of events may seem unclear. The expression “fuzzy time” is a metaphor taken from photography. Fuzziness results from a mismatched combination of space and time: a long exposure is chosen to capture the scene, but any movement blurs the final picture. Yet fuzziness is not necessarily a technical flaw; it may be a deliberate effect introduced by the photographer to show movement against a fixed background. “Creating” a blurred image – by means of a slow shutter speed – is a way of capturing movement at a given instant. The same is true for the recording of life-event histories. The aim is to choose the best “focus” i.e. the right distance for capturing the full complexity of life histories, and the best “exposure” i.e. the right timeframe for an appropriate level of detail. Should we build an overall picture via a long travelling-shot of an individual’s life, or rather a succession of close-ups illustrating key moments in their life (leaving school and entering the labour market, forming a couple, having a child, etc.)? What’s more, a life event history is not a snapshot photograph, but resembles a film after the editing process. It is a “montage” of an individual’s life story, with the leading actor presenting selected scenes to the interviewer.

Take the example of motherhood, which one might view as a relatively simple transition. Until the birth of her first child, a woman is childless, and on the day of its birth her status changes to that of a mother. This approach is a true reflection of reality, but it is also highly simplistic. If we examine how the process unfolds over time, we see that this event (first birth) is preceded by a pregnancy, whose starting point may not be perceived very accurately or, then again, may have been eagerly awaited. So one might wish to qualify this period by distinguishing between a wanted or unwanted pregnancy (see Chapter 3). Here we must rely upon the words of the respondent, whose response may reflect her feelings *ex post* (she may perceive or present the birth as planned at the time of survey, but was this truly the case when the pregnancy occurred?).

Last, one must consider the nature of the relationship between the child's mother and father. The result is a motherhood sequence which starts with the first meeting between the two parents and picks up the story from there. Depending on the type of study and its objectives, one can simply record the change of status from childlessness to parenthood, or one can seek to understand the process more fully by breaking it down into different intermediate states and thresholds which represent a veritable process of transition from the idea of parenthood to its actual accomplishment.

The researcher, the interviewer, the respondent and the others

Depending on the questionnaire design and the interviewer's expertise, the detail contained in a life-event history may vary. It may be "smoothed" so that the shortest, least clearcut or most ambiguous episodes are edited out. The respondents' own perceptions also shape the retelling of their trajectory, as do social norms and the approach adopted by researchers (see notably Chapter 4). Indeed, researchers' postulates and the categories used may prove rigid and uninformative, and the data collected may appear inconsistent. Here, the cross-matching of factual and subjective data provides a more enlightening approach for analysing situations that were previously difficult to identify (see Chapter 1).

Accounts concerning a third person serve to characterize family dynamics, precisely because of their subjectivity. For example, in a survey in Dakar, we noticed that several young men reported that their mothers were widows, when in fact they had remarried. This response represents a form of denial of the mother's remarriage. Generally speaking, if individuals are unable to date the factual succession of events in a third person's life, the information they provide is nonetheless meaningful and should be treated as such. Chapter 3, which concerns sexuality and motherhood, provides a good illustration of this. Just one person is interviewed, but her decisions and actions reflect the combined interests of a group of persons, primarily her partner. The questionnaire seeks to discover the respondent's perception of her partner's acts: their interests may diverge (see Chapter 2). And when many players are involved, confusion is possible (see Chapter 3).

Which transition: experiencing an event or changing status?

Uncertain, transient, short-lived states also blur the story, such as being with an occasional partner for example. Presented as such at the start of a relationship, this partner may, over time, become a regular companion (see Chapter 3). Likewise, respondents sometimes find it difficult to define their residential status. Numerous examples are given of the unclear boundaries between "visitor" and "being lodged" (*hébergé*), or between "housed by employer" and "*hébergé*", etc., in Chapter 4. The dynamics of such states are even more difficult to grasp when individuals change status with the household but not residential status. This is the case of adult children who continue to live in their parents' home (chapter 5). There are also many situations that could be qualified as "half-and-half": situations of alternating co-residence

for example (such as multi-residence, see Chapter 6). Such periods do not concern residence only; other areas such as economic activity¹ are also concerned. Students in paid employment, wage-earners in training paid for by their employer, and even multiple jobholding are all areas where individuals can be classified in one state or another, or be considered as belonging to both. It is a difficult task indeed to pinpoint the exact moment when a change of status occurs, if the very status is itself uncertain!

Several examples show that the process is often marked by a succession of interacting stages. A good illustration is that of the post-partum trajectory described in Chapter 3, with the end of amenorrhea, the resumption of sexual relations and the weaning process occurring in an order that differs from one individual to another (and from one society to another). This question of sequencing is also covered in chapter 5 with the transition to adulthood. It shows that we must be wary of assuming a hierarchy of states: the transition from one state to another is not necessarily a sign of progress. However, whatever the area studied, we consistently observe that not everyone completes every stage. We must also be capable of dealing with incomplete itineraries, a speciality of the life-event history approach.

Individuals' expectations of events that concern them are another source of fuzziness. Let us return to the example of motherhood: marriage comes before a birth, yet this marriage may simply serve to "regularize" the status of a child conceived outside of union. Expectations may also affect separation behaviour. Individuals who foresee the end of their union may start looking for a new partner even before actual separation occurs, this extra-marital affair being more a consequence than a cause of the marriage break-up. The sequencing of events over time may reflect their actual occurrence, but not the order in which the decisions were taken.

Last, individuals may also change their state without actually experiencing an event. The authors of Chapter 6 draw our attention to another often neglected aspect, i.e. changes in the individual's environment. For example, an individual's social or geographical environment may change, even if their place of residence remains the same. People may change from being rural to urban dwellers, simply because the area surrounding their home has become built up over the years. In the absence of founding event(s), individuals are free to interpret their own status. Likewise, in countries where polygamy is possible, the spouse of a monogamous husband may become the spouse of a polygamous husband if he takes a second wife. Here again, the transition is outside her control; she plays no part in the event which affects her. This transition may be overlooked, consciously or otherwise (Chapter 2). Such an example, among others, illustrates clearly the potential for interference between life-event histories.

¹ Not covered in this book.

Single and multiple transitions

Should one record the actual situation, the official situation, or the situation as perceived by the individual concerned? And what about incomplete transitions, i.e. in which not all stages have been completed? What should be done if the transition is frequently never completed? How can eventless transitions be apprehended and analysed?

In many cases, to capture the diversity of situations and of transitions, different characteristics are combined with the aim of defining composite states. For example, an individual may not see him/herself as “*hébergé*”, but prefer to say that he/she is housed by a friend (Chapter 4). This one word covers different realities and other information must be taken into account. Young people in employment who still live with their parents become financial contributors to the household. Even if they represent the main source of income and pay all household expenses, they are still defined as being housed in their parents’ home. Recording residential status alone is not sufficient, and additional details are needed on the type of contribution made and the young person’s true status in the household.

The notion of threshold, used by many researchers to describe the transition to adulthood, seems to be rejected by common agreement. It appears to be a poor descriptor, not confirmed by observation, not only for current generations but also for those of the past, in both North and South. This transition should rather be seen as a process of change towards a state which, in some cases, may never actually be reached. To study the transition to adulthood, different markers must be combined. Symbolic or factual events can be coupled together: first holiday without the parents, first night out, getting a driving licence, entering university or becoming an apprentice. A single event, or the completion of the first stage are not significant in themselves. On the contrary, one should not expect individuals to have completed all stages before they can be considered as adults.

The result is highly promising in terms of both observation and analysis. The questions find answers, methods are proposed and specific procedures implemented. Bringing together researchers from different disciplines (demography, sociology, geography, economics) and backgrounds (both North and South), the interest of generalizing the approach beyond specific cases becomes apparent, providing a solid empirical foundation to the discipline. Of course, as observation improves, trajectories become more detailed and analysis must be capable of processing the growing complexity of information. The fuzziness that results from the heterogeneity of individual trajectories is a rich focus of research to be addressed in the field of event history analysis. The ideas presented in this book should enable researchers to provide an ever clearer picture of social complexity.