

# The diversity of pathways to adulthood in France: Evidence from a holistic approach

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## Title:

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## Abstract:

Youth is often depicted as a transition from childhood to adulthood in the familial, residential and occupational domains. This approach brings in the idea of thresholds, such as leaving the parental home, getting married, having a first child or having a stable job. In practice, it has the advantage of allowing relatively simple comparisons of pathways to adulthood in time and space. However the study of thresholds has several limitations. First, it masks the problem of the reversibility of events, their non-occurrence and the difficulty of defining clearly bounded markers. Second, it barely apprehends the links between the familial, residential and occupational domains. Finally, it produces aggregated outcomes, partly ignoring the heterogeneity of individual processes of transition to adulthood. This work attempts to overcome these limitations by tackling pathways to adulthood in France through trajectory typologies built by means of Optimal Matching Analysis techniques.

## Keywords:

pathways to adulthood; France; optimal matching analysis; life course; sequence analysis

## 1. The limits of a transition-based approach

The sociology of youth has attracted relatively belated interest in French sociology. Nonetheless, the evolution of familial and educational structures has gradually led to the construction of a new category of individuals: "young people". To facilitate understanding of this hazily outlined and often very heterogeneous category, attention has frequently been to the pathways to adulthood that they experience. Youth is represented as a transitional period between childhood and adulthood. The pathway to adulthood proceeds in different spheres, one is familial and matrimonial, the other is educational and occupational.

Central to the pathway-approach is the idea of transitions. Examples of such transitions are leaving the parental home, first union formation and first childbirth for the first sphere, and completion of education and entry into a first stable job for the second one. From a practical point of view, the notion of transitions presents the advantage of allowing a relatively simple comparison between the different types of pathways to adulthood in time or space, once the events to be taken into account have been determined. Using this approach, several studies have shown the diversity of transition patterns across European countries (Chambaz, 2000; Van de Velde, 2004). For example, southern European countries, where people leave home late, contrast with northern European countries, where leaving home occurs at an earlier age. These differences in pathways reflect social, cultural and institutional differences between societies, for instance between the Mediterranean familialistic model and the Nordic public welfare model, leading to quite different forms of autonomy attainment. Other studies have emphasized the changes in pathways to adulthood. For instance, France faces a postponement of the entry into adulthood, through a desynchronization of familial and occupational transitions (Galland, 2000). The postponement of access to independence is linked to prolonged education and to a later entry into working life. A transitional period thus has appeared between the end of adolescence and the entry into adulthood. This period is sometimes seen as a period of progressive preparation for adult roles. More generally, western countries are witnessing the simultaneous development of standardization of pathways to adulthood, with an increasing compactness of the timing of transitions, and their individualization, with a decreasing orderliness of the sequencing of transitions (Shanahan, 2000). This reflects the modernization of societies, through the changes on the labour market, the growing role of State and the expansion of the education system.

Nevertheless, a focus on transitions has a number of limitations. First, it conceals the reversibility of certain situations, the fact that events may never be experienced by individuals, and the difficulty of clearly defining the occurrence of an event. For example, leaving the parental home is an increasingly complex process (Goldscheider, 1993; Villeneuve-Gokalp, 1997). The transition to total residential independence is gradual. As a consequence of prolonged education and the delay in entering a stable job and attaining financial independence, new residential situations are developing, such as living in multiple households at the same time. For example, some students live alone during the week, but with their parents during week-ends and holidays. Moreover, parents may keep on supporting their children after they left home by paying for their accommodation. Young people also often return to the parental nest, thus becoming "boomerang kids" (Mitchell, 2006) or leave home very late. The distinction between leaving home and living away from home (Buck & Scott, 1993) or between leaving home, autonomy and independence raises the problem of defining markers. On the family side, the hugely improved access of women to higher education and occupational autonomy has major implications for familial structures. Conjugal instability is increasing, with a rise in union separations, divorces and episodes of single life, and the drop in the number of marriages (Prioux, 2006). Familial schedules alter, as entry into a first union and first childbirth are postponed. As a consequence, new family models spread, such as

unmarried cohabitation, single-parent families, blended families and "living apart together" relationships; familial biographies are becoming more complex and diverse. Finally, in a context of changes in labour market opportunities and increasing unemployment, youth transitions from school to work are getting more chaotic. Quite some time may elapse between the first time young people leave the educational and training system and the time they reach a stable occupational position. Indeed, this stable occupational position can be preceded by varying episodes of unstable jobs or unemployment. As a result, the transition from school to work is less an irreversible shift than a hazy process. Furthermore, the study of transitions barely apprehends the link between the multiple dimensions of the life course. The methods traditionally used, such as median age calculation or event-history models, allow one to study the timing of transitions and their predictors. But they generally focus on the simultaneous analysis of one or two events only. And yet, research has shown that predictors of transitions are linked to the order in which the events happen (Marini, 1984; Rindfuss, 1987; Kiernan, 1991). The existence of a normative order of events is sometimes even postulated (Elder, 1974), and convergence to this norm and its consequences for the life cycle can then be measured (Hogan, 1978). Lastly, the study of transitions produces aggregated results, partially hiding the heterogeneity of individual pathways to adulthood. Is the change in the timing of the different events marking the trajectory the result of a weakening or on the contrary of a strengthening of certain types of pathways to adulthood?

The purpose of this study is to overcome these limitations by tackling the question of pathways to adulthood through a holistic approach, which considers a trajectory as a whole, as a meaningful conceptual unit, rather than an atomistic approach based on the idea of events (Billari, 2001a). For over a decade, the pertinence of this perspective has been increasingly acknowledged in life-course research. But its empirical application is still limited in scope, especially in the French context. Moreover in the field of transition to adulthood, studies tend to concentrate on one or two of the life-course dimensions (usually related to family formation).

In this article, based on event-history data collected in the Familles et employeurs survey (2004-2005), individual trajectories are built as sequences of states integrating residential, familial and occupational situations, and subsequently grouped together according to their degree of similarity using optimal matching analysis techniques. The typology of trajectories produced constitutes an analysis tool that captures a large range of situations (uncompleted events, reversibility, etc...) and sheds new light on the heterogeneity of pathways to adulthood and their evolution. More specifically, through this approach the following questions are tackled: What are the various patterns of pathways to adulthood among French young adults born between 1954 and 1969? Are there differences between women and men in these patterns? How do these patterns change over cohorts?

#### 2. Implementing a holistic approach

#### 2.1. Data

The Familles et employeurs survey carried out by INED<sup>1</sup> and INSEE<sup>2</sup> in 2004-2005 examined the individuals' work-life balance. Its purpose was to describe how family and working life are reconciled. The first section of the survey involved families – 9,745 men and women aged 20-49 in metropolitan France - and a second part gathered information about the interviewees' employers. We focus on the trajectories between ages 18 and 35 of individuals

<sup>&</sup>lt;sup>1</sup> Institut National d'Etudes Démographiques, i.e. the French national institute for demographic studies.

<sup>&</sup>lt;sup>2</sup> Institut National de la Statistique et des Etudes Economiques, i.e. the French national institute of statistics and economic studies.

aged at least 35 at the time of the survey: our sample is composed of 2,749 women and 2,428 men born between 1954 and 1969. These generations are of particular interest because they entered into adulthood during a period of major changes in familial models and labour market. Indeed, a break in the tendencies of familial behaviours is often located at the beginning of the 1970s and the two oil shocks are viewed as the end of the "Glorious Thirty", characterized by an unprecedented economic growth, and the starting point for a significant rise of unemployment.

Only the data from the Familles section are used here<sup>3</sup>. It comprises an annual calendar of retrospective information about residential, familial and occupational histories. Information on residential trajectories only covers the first year in which individuals lived in accommodation paid for by themselves or by their employer. Possible returns to accommodation paid for by parents are unknown. So housing events unfortunately have to be considered as irreversible. The residential trajectory is then coded as an irreversible sequence of two states: has never lived in independent accommodation, and has ever lived in independent accommodation. With respect to events in the partnership domain, the survey includes information on the timing of unmarried cohabitation, marriage and separation. So it is easy to construct the conjugal trajectory, varying between three reversible states: single; cohabiting; married. Furthermore, the birth year of children is known. The parenthood trajectory is constructed based on the birth years of all children. It includes the following successive states: no child; one child; two children; three children or more. Finally, respondents mentioned each start and end year during which they spent 6 months or more as: student; doing national service; unemployed and continuously looking for a job; part-time worker; in short jobs alternating with unemployment periods; in jobs lasting more than 6 months; in another situation (inactive, homemaker...). In order not to create too many states, these activity states were regrouped into four: student; inactive (including unemployed and doing national service); part-time worker; full-time worker.

## 2.2 Analysis strategy

Thanks to the richness of the data collected, the study is not restricted to demographic markers but takes into account a relatively exhaustive set of reversible and multifaceted situations. Using these data, our aim is to "fish for patterns" (Abbott, 2000) of pathways to adulthood. This can be achieved through the use of Optimal Matching Analysis (OMA) techniques. OMA is based on a set of dynamic algorithms mainly used in molecular biology to analyse similarities between DNA strings. It was introduced into the field of social sciences by Andrew Abbott in the 1980's (Abbott & Forrest, 1986). Its principle is based on the notion of similarities between pairs of sequences. The main idea consists in measuring the dissimilarity between two sequences by calculating the cost of the transformation of one sequence into the other. The transformation is carried out by means of three elementary operations: insertion (one element is inserted into the sequence), deletion (one element is deleted from the sequence) and substitution (one element is substituted to another). Each elementary operation can be assigned a specific cost. A series of operations costs the equivalent of the sum of the elementary operations involved. The distance between two sequences is defined as being equal to the minimal cost of the transformation of one sequence into the other. Specific dynamic algorithms guarantee that the minimal cost is reached (Sankoff & Kruskal, 1983). Optimal matching of each pair of sequences leads to the creation of a distance matrix, that subsequently is used to classify sequences according to their degree of similarity, using clustering methods for example, and to obtain typologies.

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<sup>&</sup>lt;sup>3</sup> The *Employeurs* section focused on firms rather than on individuals.

In this study, we are interested in multidimensional trajectories (residential, conjugal, parenthood and occupational trajectories), which have received little attention in the existing life-course literature using a holistic approach (Elzinga, 2003; Aassve et al, 2007; Pollock, 2007). From a methodological point of view, there are at least two ways to combine these multidimensional trajectories. A first strategy consists in first using optimal matching to calculate four distinct distance matrices (one for each trajectory) and then combining these matrices into one by means of linear combination (Han & Moen, 1999; Blanchard, 2005). A second strategy consists in building a synthetic state variable combining the different characteristics (Abbott & Hrycak, 1990; Stovel et al, 1996; Blair-Lov, 1999; Aassve et al. 2007; Pollock, 2007). However, the variable created this way would potentially have 2\*3\*4\*4=96 states<sup>4</sup>, which raises two issues. The ability of OMA to produce interesting results with so many states has rarely been tested. In addition, it might be difficult to arrive at a convincing substantive interpretation of the created typology. At the same time, this second strategy is more satisfying from a theoretical point of view, as the combination of the different dimensions of pathways in a single variable takes into account the fact that these dimensions evolve interdependently. In addition, the empirical analysis revealed quite distinct and interpretable clusters. Therefore, the second strategy was finally chosen.

The choice of substitution, insertion and deletion<sup>5</sup> costs is a crucial step in optimal matching analysis. A common way to set the substitution costs is to derive them from the transition rates between the various states (Rohwer & Pötter, 2005). As transition rates may differ greatly according to age (for instance the probability of having a second child is very different at age 20 and at age 30) and may not be symmetrical (for example, childbearing is not reversible), this cost scheme is not appropriate. We chose the alternative option of taking into account the multidimensionality of sequences: the substitution cost between two states is equal to the number of dimensions in which the situation differs between the states. The more differing dimensions there are, the higher the cost will be. For instance, the substitution between "never lived in a self-paid accommodation, inactive, single with no child" to "ever lived in a self-paid accommodation, in full-time job, married with no child" costs 3: 1 for the residential dimension, 1 for the occupational one and 1 for the conjugal one. The *indel* cost was then set to slightly more than half the maximum substitution cost, to avoid an excessive use of *indel* operations and keep the information about the timing of transitions (MacIndoe, Abbott, 2004)<sup>6</sup>.

The distance matrix produced by OMA is submitted to Hierarchical Clustering Analysis using Ward's criteria<sup>7</sup>. An eight-cluster typology is then selected<sup>8</sup>.

<sup>&</sup>lt;sup>4</sup> The residential dimension has two states, the conjugal one has three, the parenthood and the occupational ones each have four. Empirically, only 90 states are experienced for at least one year by at least one individual.

<sup>&</sup>lt;sup>5</sup> To match two sequences, inserting an element in one sequence is the same as deleting an element from the other. Insertion and deletion thus have the same cost, known as the *indel* cost.

<sup>&</sup>lt;sup>6</sup> As substitution costs range from 0 to 4, *indel*=2.1.

<sup>&</sup>lt;sup>7</sup> Ward's criterion is known to produce homogeneous and compact clusters (Nakache, Confais, 2004). Moreover, attempts using WPGMA and UPGMA criteria led to rather similar results.

<sup>&</sup>lt;sup>8</sup> Calinski-Harabasz and Hartigan criteria (Milligan, Cooper, 1985) suggested six or eight clusters. The eight-cluster solution has the advantage of revealing two specifically female patterns. Furthermore, these criteria are only guidelines, as the creation of a taxonomy in the social sciences should be guided above all by background theories, heuristical views and a balance between parsimony and clusters homogeneity: "Classifications so produced can never be true or false, or even probable or improbable; they can only be profitable or unprofitable" (Williams & Lance, 1965)

## 3. Results

## 3.1 Various patterns of pathways to adulthood

Describing a typology created by the clustering of multidimensional trajectories is not easy, due to the high number of states. Indicators describing durations (for example, duration in "student" state) or episodes (for example, number of "unemployment" episodes in the trajectory or proportion of individuals who have experienced at least one "inactivity" episode) allow to distinguish the main characteristics which led to the building of classes. These indicators may be computed for the combined states, but also for each dimension separately, which simplifies the interpretation of the clusters. Graphical representations must be built separately for each dimension too to ensure legibility. But the clusters can also be summarized by presenting "typical trajectories", i.e. *medoid* sequences for each cluster of an adjiving them a summary label (Table 1).

## Table 1 about here

The largest cluster, that we called "spouses with one child", includes 30% of the sample (Table 2). It is mostly composed of individuals who have a full-time job, get married and have one child at the end of the studied age range, i.e. at age 35. "Spouses with multiple children" (14%) have a rather similar profile, but they form a family earlier than the former: they live in an accommodation paid for by themselves or by their employer, get married and have a first child a few years earlier than "married with one child". They also have more children: all of them have two and some have three or more. The "cohabiting parents" cluster (12%) groups individuals who have a full-time job, live in a couple and have children too, but are unmarried. Compared to "spouses with children", childbearing is also slightly postponed. "Late cohabitors" (18%) have the distinctive characteristic of staying single for a large part of their young adult trajectory, and entering a union through cohabitation. Added to that, they do not have children until age 35. "Late nest-leavers" (9%) stay single even longer, as they have not experienced a union at the age of 35, and do not have children either. However, their principal particularity is that they leave the parental home very late compared to any other cluster, often after age 30. "Single parents" (6%) stay single most of their trajectory, although some of them experience short spells in a union, and have at least one child (and sometimes more) when they reach 35. And finally, two clusters are distinguished by the occupational dimension of the pathway to adulthood. "Inactive parents" (6%) are inactive most of their trajectory, often after an early and very short spell of full-time employment, while "parents leaving full-time job" (5%) work full-time for several years before becoming inactive or opting for part-time employment. All of them get married and have children, but "inactive parents" leave the parental home and form a family earlier than any other cluster.

### Table 2 about here

These patterns of pathways to adulthood are not equally distributed between women and men. The best evidence is given by the last two clusters, "inactive parents" and "parents leaving full-time job", which are almost exclusively reserved to women: only 12 men follow these pathways. At the same time, men are more likely to be classified as "spouses with one child" (35% vs 26%), "late cohabitors" (21% vs 15%) or "late nest-leavers" (12% vs 6%). Furthermore, women's share in the "spouses with multiple children", "cohabiting parents"

<sup>&</sup>lt;sup>9</sup> The *medoid* sequence is the individual sequence that is the least distant from the other individual sequences of the cluster (Kauffman & Rousseeuw, 1990; Aassve et al, 2007).

and "single parents" clusters is rather similar to that of men. These results underline the central role of the work-family balance in women's pathways to adulthood, while all men belong to clusters with complete full-time employment careers. Even if most women reconcile work and family, 20% have patterns that tend to favour family rather than work ("inactive parents" and "parents leaving full-time job"). On the other hand, men seem to postpone family formation more than women do. Men's cluster classification mainly seems to depend on their time of entry into the various adult roles.

#### Table 3 about here

We also examined how young adults' pathways into adulthood are related to their level of education. Results are presented in Table 3. Patterns of individuals who postpone family formation ("spouses with one child" and "late cohabitors") have the highest level of education: more than one quarter of them have at least a bachelor's degree. For them, a long period of educational enrolment is associated with a late entry into partnership and parenthood. With regard to women, those who quit full-time employment to work part-time or become inactive at childbearing are better qualified than those who stay inactive most of their career (half of whom have no diploma). Lastly, late departure from the parental home often concerns poorly qualified young adults: the postponement of departure is partly due to an insecure position in the job market, which confirms results from earlier studies in France (Galland, 1995).

## 3.2 Contrasting trends in pathways to adulthood

Recent changes in demographic behaviour are commonly stated to imply a diversification of life course patterns (Shanahan, 2000). However, some authors pointed to a lack of precision in the concepts employed: de-standardization, de-institutionalization, individualization, pluralization or differentiation are often used interchangeably to capture historical changes (Brückner & Mayer, 2005). They suggest that these concepts actually refer to distinct dimensions of change, that may vary independently from each other, and thus should be distinguished. For instance, they propose that de-standardization implies that "life states, events and their sequences can become experiences which either characterize an increasingly smaller part of a population or occur at more dispersed ages and with more dispersed duration". Differentiation would be defined as "the process where the number of distinct states or stages across the life increases". Brückner and Mayer (2005) also regret the lack of systematic data to assess these hypotheses. However, a few articles tackled the destandardization issue by means of specific statistical tools and/or cross-national data. Entropy analysis has been used to examine heterogeneity in individuals' life courses (Billari, 2001a; Fussell, 2006; Fussell et al, 2007; Widmer &, Ritschard, 2009). De-standardization has also been assessed using sequence analysis (Liefbroer & Elzinga, 2007; Widmer & Ritschard, 2009). Most of these studies conclude that family-life trajectories have recently become more diverse in many developed countries, while the situation is less clear-cut concerning occupational careers.

We will now examine the evolution of pathways to adulthood using the typology built in the previous section (Table 4). Overall, this evolution clearly reflects the dominant changes in family structures (rise in cohabitation, divorce and singlehood, postponement of family formation) and women's massive participation in the job market. Indeed, we can observe that the size of the "late cohabitors" cluster increases over time to become the second most important pattern among the youngest cohort. In addition, the sizes of the "cohabiting parents" and "single parents" clusters more than double between 1954-1957 and 1966-1969.

On the other hand, relative membership of the "spouses with one child" cluster falls slightly (although it remains the most important pattern) and the size of the "spouses with children" cluster is more than halved. Moreover, the size of the "parents leaving full-time job" cluster slightly decreases, especially between the two oldest cohorts, while the relative share of the "inactive parents" cluster drops dramatically, in particular from the 1958-1961 to the 1962-1965 cohorts. These latter results underline the spread of reconciliation between family and work among women.

### Table 4 about here

For both women and men, the cluster of "spouses with one child" remains the prevailing pathway into adulthood, but its importance decreases slightly over time. With regard to the other patterns, the second largest one for the oldest cohort ("spouses with children") is being gradually replaced by "late cohabitors" and "cohabiting parents". This supports one of the assumptions of the de-standardization of the life course hypothesis, which is that the dominance of specific types of life courses is weakening (Brückner & Mayer, 2005; Elzinga & Liefbroer, 2007). That hypothesis can also be assessed by means of a relative entropy index 10, applied to the cluster distributions for each cohort (Table 4). For both sexes, the heterogeneity of the cluster distribution decreases across the oldest cohorts (i.e. the relative entropy increases), before starting to increase slightly for the youngest cohorts. So overall, we may conclude that a slight weakening of the dominance of specific patterns occurs between 1958-1961 and 1962-1965.

Another assumption of the de-standardization of the life course hypothesis claims that individual life courses are supposed to be increasingly dissimilar (Brückner & Mayer, 2005; Elzinga & Liefbroer, 2007). Distances computed by optimal matching may be used to examine the similarities of the trajectories between subsamples of individuals, for instance to see how these similarities evolve over time (Table 5). Women's pathways to adulthood are more dissimilar than men's. Looking at the various dimensions of pathways<sup>12</sup>, the major difference concerns employment (due to women's balance between work and family) and, to a lesser extent, childbearing. On the other hand, men's residential sequences are more dissimilar than women's, as they more frequently delay departure from the parental home. With regard to trends over time, pathway dissimilarity tends to increase slightly (in a more pronounced way for women than for men), particularly between the oldest cohorts. This seems to be mostly the result of the increasing divergence in the conjugal dimension, related to the spread of cohabitation.

## Table 5 about here

Let  $N_t$  be the number of individuals at time t,  $p_{tj}$  the proportion of  $N_t$  in state j, j=1,...,q and by convention  $0x\log(0)=0$ , relative entropy is defined as:

$$E_t = -\sum_{j=1}^q p_{tj} \log(p_{tj}) / \log(q)$$

Relative entropy is equal to 0 when all individuals are in the same state (that is when heterogeneity is minimal) and equals 1 when individuals are equally spread between the states (that is when heterogeneity is maximal).

<sup>&</sup>lt;sup>11</sup> This result must be treated with caution, as it may be sensitive to the number of clusters chosen. However, it is supported by the computation of relative entropy with 15 and 20 clusters.

<sup>&</sup>lt;sup>12</sup> In order to analyse the results about average distance in greater depth, distances were also computed for residential, occupational, conjugal and parenthood sequences separately, using OMA in the same way as with multidimensional pathways.

Finally, we will address another dimension of change in life course patterns, that is the differentiation process. An indicator that has recently been suggested to measure the level of differentiation of life course patterns is the turbulence index (Elzinga & Liefbroer, 2007). It is also based on sequence analysis and aims at capturing the "volatile and haphazard nature of the process of differentiation". Technically, it takes into account the number of transitions, the number of distinct states and the variation in the duration of events. Applied to our data, it first reveals that pathways to adulthood are more turbulent for women than for men (Table 6). Once again, this difference mainly lies in the employment dimension 13, as women may quit their job or turn to part-time working after the birth of a child. Furthermore, turbulence of pathways slightly increases across cohorts for both women and men, chiefly because of increased turbulence of occupational sequences, which may be explained by the growing instability of careers among these generations.

### Table 6 about here

In summary, jointly looking at dominance of specific pathways, similarity and turbulence, a minor upward trend is observed in the de-standardization and differentiation of pathways to adulthood among French young adults born between 1954 and 1969.

## 4. Discussion

In this study, we examined pathways to adulthood via a holistic approach. By using multidimensional trajectories – combining residential, familial and occupational information – and by conducting Optimal Matching Analysis, typologies of pathways were built for French women and men born between 1954 and 1969. This showed a great diversity of pathways, mainly related to the reconciliation of work and family for women and to the spread of cohabitation and postponement of family formation for both sexes. Their evolution through cohorts also highlighted a slight rise in de-standardization and differentiation of the early life course. From a methodological point of view, OMA has proven its ability to provide interesting insights even when dealing with multidimensional sequences and a high number of states. Entropy and turbulence may also be useful tools to complement life course analysis.

A few avenues of research still remain open to explore the pathway to adulthood in greater depth. To start with, the survey used in this study only collected data on the first year that respondents live in accommodation paid for by themselves or by their employer. Periods during which they lived in an accommodation paid for by parents are unknown, as well as possible returns to the parental nest. Nevertheless, these dimensions play a major role in the transformation of pathways to adulthood, as for instance low educated men often stay longer in the parental home. To study these transformations would require more detailed data. In addition, values of indicators such as average distances between sequences or turbulence are difficult to interpret in themselves: their relevance rests on comparisons. So although upward trends were found, a larger range of cohorts would allow a fuller assessment of the importance of the de-standardization process. Another way to increase the comparative power of our approach would be to use similar data from other countries.

Furthermore, a proportion of respondents has never experienced certain events before the age of 35, in particular independent accommodation, union formation or parenthood. But it is impossible to know whether this is a matter of simple postponement or of a situation that

<sup>&</sup>lt;sup>13</sup> As for average distances, turbulence was also computed for residential, occupational, conjugal and parental sequences separately.

will last. On account of prolonged educational enrolment and of later family formation, it would probably be desirable to extend the studied trajectories beyond the age of 35. Moreover, state and family intervene to support individuals during youth. But this support may also be provided at later stages of the course. So one can even imagine studying the whole life as a trajectory, for instance by concentrating on the level of dependence that individuals experience. That may require changing some of the markers used in building the trajectories.

The question of the choice of markers is central to this study of pathways to adulthood. With the evolution of western societies, traditional markers are becoming less relevant. For example, Bozon (2002) shows that traditional rites of passage, such as first communion or conscription, are being replaced by contemporary rites that are first-time experiences: first sexual relationship, passing the driving test, and buying a first car... Moreover, Arnett (2001) introduces the notion of emerging adulthood, which is a period of the life course stretching from adolescence to adulthood. It is characterized by a relative independence from agenormative tasks, by experimentation with social roles and by little meaningful commitment to one's relationships and organizational involvements. In this context, young people identify individualistic indicators of maturity as the new markers of adulthood and demographic markers are considered of secondary importance. It therefore seems essential to test the relevance of new markers, factual or linked to a subjective and individual assessment of the life course. It is also possible to combine traditional marker analysis with more qualitative data describing actual experiences and perceptions (Tichit & Lelièvre, 2006). However, the few studies dealing with this issue show that traditional markers are still significantly linked to the feeling of being an adult (Shanahan et al, 2005).

To conclude, the approach adopted in this article advocates a distinctive perspective on pathways to adulthood. Beside a developmental view of an irreversible and universal transition from youth to adulthood (and its related roles), one should aim at understanding complex life courses, fluctuating through a universe of diversified situations.

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Table 1

Medoid sequences of the clusters of pathways to adulthood.

	residential dimension	оссир	ational din	nension	con	jugal dime	ension	parenthood dimension		
Cluster	leaving parental home	student	full-time job	inactivity	single	cohabi- tation	marriage	1st child	2nd child	3rd child
Spouses with one child	24	18-19	20-35	-	18-23	-	24-35	29	-	-
Late cohabitors	23	18-19	20-35	-	18-32	33-35	-	-	-	-
Spouses with multiple children	21	18	19-35	-	18-20	-	21-35	23	27	-
Cohabiting parents	22	-	18-35	-	18-21	22-35	-	27	33	-
Late nest-leavers	33	-	18-35	-	18-35	-	-	-	-	-
Inactive parents	19	-	-	18-35	18	-	19-35	21	24	30
Single parents	22	-	18-35	-	18-35	-	-	27	-	-
Parents leaving full-time job	23	18-20	21-25	26-35	18-22	-	23-35	25	28	-

**Note**: The *medoid* individual of the "spouses with one child" cluster left school at 20 to get a full-time job, left the parental home for the first time and got married at 24, and had a first child 5 years later. "-" means that the situation has never been experienced.

Table 2

Characteristics of the clusters of pathways to adulthood.

Cluster	N	%	% women	% men	d*
Spouses with one child	1564	30,2%	25,8%	34,7%	16,5
Late cohabitors	929	17,9%	14,7%	21,3%	14,4
Spouses with multiple children	729	14,1%	13,7%	14,5%	13,3
Cohabiting parents	621	12,0%	12,6%	11,4%	19,9
Late nest-leavers	450	8,7%	5,7%	11,8%	11,8
Inactive parents	323	6,2%	12,1%	0,2%	16,4
Single parents	294	5,7%	5,6%	5,8%	16,7
Parents leaving full-time job	266	5,1%	9,9%	0,3%	20,1
Total	5176	100,0%	100,0%	100,0%	

<sup>\*:</sup> d is the average distance to the *medoid* of the cluster. The lower the distance d, the more homogeneous the cluster.

 Table 3

 Distribution of educational attainment by cluster of pathway to adulthood.

cluster	no diploma	high school diploma or lower	bachelor's degree or higher	total	
Spouses with one child	17,8	56,0	26,2	100,0	
Late cohabitors	17,4	49,3	33,3	100,0	
Spouses with children	29,5	58,9	11,6	100,0	
Cohabiting parents	29,4	57,1	13,5	100,0	
Late nest-leavers	38,9	48,6	12,5	100,0	
Inactive parents	50,3	47,7	2,0	100,0	
Single parents	19,9	61,9	18,2	100,0	
Parents leaving full-time job	22,1	54,9	23,0	100,0	
Total	25,0	54,5	20,6	100,0	

Table 4
Cluster distribution by sex and cohort (%).

Cluster		wor	nen		men				
Ciustei	1954- 1957	1958- 1961	1962- 1965	1966- 1969	1954- 1957	1958- 1961	1962- 1965	1966- 1969	
Spouses with one child	27,0	26,1	25,2	24,8	38,8	33,8	34,5	32,6	
Late cohabitors	11,1	14,3	14,7	18,6	15,2	19,6	23,5	26,1	
Spouses with children	19,1	14,2	14,0	7,5	23,6	15,2	10,4	10,8	
Cohabiting parents	7,1	9,3	15,8	18,3	6,1	10,7	13,1	14,6	
Late nest-leavers	4,6	6,1	5,5	6,2	12,1	15,0	11,5	7,9	
Inactive parents	16,4	15,5	8,9	7,5	0,4	0,4	0,0	0,0	
Single parents	3,0	4,7	7,2	7,3	3,5	5,2	6,3	7,7	
Parents leaving full-time job	11,7	9,8	8,6	9,8	0,2	0,0	0,7	0,2	
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	
Relative entropy of cluster distribution	0,912	0,942	0,948	0,937	0,756	0,804	0,802	0,793	

**Table 5**Average distance between individuals' pathways by sex and cohort.

		Wor	men		Men			
Average distance	1954- 1957	1958- 1961	1962- 1965	1966- 1969	1954- 1957	1958- 1961	1962- 1965	1966- 1969
multidimensional pathway	30,1	30,9	31,4	30,8	27,7	28,2	28,1	28,1
residential sequence	7,2	7,7	8,0	7,7	9,5	9,7	9,2	8,4
occupational sequence	18,4	19,2	19,0	19,1	9,2	9,9	10,0	10,0
conjugal sequence	15,4	17,7	19,2	18,9	16,2	17,2	17,4	17,5
parenthood sequence	18,3	18,3	17,5	16,4	15,8	14,2	13,7	14,0

**Table 6**Turbulence of pathways to adulthood, by sex and cohort.

		Wor	nen		men			
Turbulence	1954- 1957	1958- 1961	1962- 1965	1966- 1969	1954- 1957	1958- 1961	1962- 1965	1966- 1969
multidimensional pathway	7,2	7,5	7,9	8,2	6,9	7	7,5	7,6
residential sequence	3,1	3,0	3,0	3,4	3,6	3,6	3,9	3,8
occupational sequence	4,0	4,5	4,8	5,2	3,2	3,3	3,6	4,0
conjugal sequence	3,6	3,7	4,0	4,2	4,0	4,1	4,2	4,3
parenthood sequence	4,6	4,4	4,6	4,5	4,2	3,9	4,0	4,0