Intergenerational mobility in the transition from education to labour market

and early career: the case of university students in Catalonia¹

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Abstract

The Local Government of Catalonia has charged an analysis of the labour insertion

of the university graduates students 4 years after having left the university. The

survey that was carried out in 2008, pick up information of 12.258 graduated in the

academic year 2003/2004 at 7 Catalonian universities. The aspects that are

approached are linked with the development of the academic activities, the early

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labour market's insertion of graduated in their professional development as well as the origin of their parents related with the occupational position and also the maximum study level.

1. Introduction

The transition from school to work or young people's labour transition is one of the most determinant phenomena in the construction of people's adult life, and, consequently, of the future of our societies. Its study, therefore, is in line with social scientists' interest in describing and interpreting the process through which young people become adults.

The specific manner in which individuals enter adulthood undoubtedly is the result of their own decisions, as well as of the social and cultural contexts inspiring it (social class, gender, place of origin, etc.). But it also depends upon institutional configurations which limit and channel such decisions: educational opportunities, strategies applied by the employers who hire them or not, the structure and preferences of active population who shall compete with them, public policies supporting youth employment, etc.

In sum, the transition from school —and from the university in particular— to the world of labour is a subject of study which involves various dimensions, is suitable to be interpreted from different perspectives, and is connected to the complexity and variability of our labour markets.

In order to focus such a complex subject of study as young people's labour transition, it is essential to place it within a historical perspective (Sala et al 2007).

From a historical viewpoint, the generation whose professional insertion we are analyzing is, in connection with education, a generation educated at the height of mass education, quite contrary to what happened to their parents, who were born at the end of the forties and attended school during the fifties and the sixties, characterized by the educational misery of Franco years.

Educational expansion is one of the most decisive social phenomena in the second half of the 20th century in European societies. It is the result of a historical consensus among states, productive organizations, and individuals and families, all of them interested in contributing to the improvement of education levels. It is, therefore, a large-scale extension of education, both among population (through the universalization of the educational system) and over time (medium duration of studies has not stopped increasing from the decade of the 60s in the past century). In the Spanish case, education improvement has been slower than in surrounding countries, though more abrupt. Consequently, differences in educational opportunities available to the generations under study and those available to their parents are much greater than the differences existing in neighbouring countries for the same generations (Beduwe, Planas 2003:173-175).

In these pages we shall analyze the professional insertion of university students graduated in 2004 and shall compare it with that of their parents; we can consider it an emblematic question as in this case the distance between parents' date of birth and their children's graduation, i.e., parents born around 1950 and children graduated in 2004, covers this half century dominated by educational expansion.

The data shown below allow us to know whether our university system, the set of our universities, play the role of social booster some people ascribe to it, or, contrariwise, as other people claim, it reproduces the differences derived from the

social origin of the young, preventing access and/or conditioning their academic performance.

Methodological note on the survey:

Labour insertion studies on Catalonian universities are being carried out by the Agency for Catalonia University System Quality (AQU) since 2001. The last study was made between January 16 and March 13, 2008. The surveyed population graduated in the academic year 2003-2004 amounts to 12,258 people, although in the case of medicine, the reference populations are those who graduated in 2001, since they have a longer labour transition than graduates from other study courses (AQU, 2008, Page. 5).

2. What universities are we talking about?

The distribution of university students between public and private sectors in Catalonia is 90% for the public sector and 10% for the private sector. The survey on which this paper is based does not include graduates from all the universities in Catalonia, in the first place, because it was considered that the students from the Open University of Catalonia (who represent 18% of all students), given the peculiar distance learning characteristics, could not be analyzed jointly with those from compulsory-attendance universities, and in the second place, because graduates from 3 private universities who represent 7% of all university students could not be interviewed.

Therefore, the surveyed population includes the graduates from all public compulsory-attendance universities, and from one private university which represents 25% of the students in the private sector. These universities represent 75% of all Catalonian students.

The survey includes the two "historical" universities (prior to the year 1968) in Catalonia: the Universitat de Barcelona (UB) and the Universitat Politècnica de Catalunya (UPC); a public university created in 1968, the Universitat Autònoma de Barcelona (UAB), which were born in the 80s, at the time of university decentralization, and those created more recently, such as the public Universitat Pompeu Frabra (UPF) and the private Universitat de Vic (UV).

3. What is the education level of university graduates' parents?

The sociological literature has been traditionally highly involved in the analysis of the relationship existing between education level and occupational status, and has found a very high relationship between both elements (Boudon, 1983, p. 40).

The analysis of the socio-economic status of a determined population according to the application of occupational or educational indicators (or both of them) contributes different perspectives. The education indicator makes reference to the family origin of students at their early age, in terms of cultural capital, and relates to the educational opportunities available to each generation. By contrast, the occupation indicator reflects a situation which may be modified more easily than the education level, since parents may change their occupation along their professional life, but they reach a determined level of education while they are young and it is difficult for them to change it afterwards.

The survey carried out among university graduates, as already stated, includes the variables 'parents' education level and occupation', and, accordingly, our work addresses the family origin of graduates from the analysis of these two dimensions. In the particular case of our analysis, occupation is an indicator of parents' socio-

economic level at the moment of the survey (2008), while the education level indicator refers to parents' young years, but there is a relationship between both indicators (Pearson's r 0.51). In methodological terms, it is necessary to highlight that the answer by university graduates on both topics (education and occupation of their parents) exceeds 98%, with which we have been able to establish a good basis to perform the analysis presented below.

In our analysis, the variable which allows us to identify the education of graduates' parents does not make any distinction between father and mother, and is classified into five categories, as shown in Table No. 1. In order to achieve a greater descriptive and expositive capacity on the origin of university graduates in terms of their parents' education level, these categories are subdivided into three groups, namely: parents who have completed elementary school, parents who have completed secondary school (one or both of them), and parents who have higher education (one or both of them).

A first data of a global nature is that most graduates come from homes where parents have elementary education at the most (40.1%); the rest is distributed approximately in equal parts between those graduates whose parents have secondary education and those who have higher education.

Table No. 1: Maximum level of studies of university graduates' parents.

Parents' maximum level of studies	Cases	%	Subdivision into 3 categories	%
Both parents have elementary education or none	4,908	40.1	Up to elementary education	40.1
One of them has secondary education	1,828	14.9	Have secondary education	30.6
Both of them have secondary education	1,918	15.7		
One of them has higher education	2,054	16.8	Have higher education	29.3
Both of them have higher education	1,524	12.5		
Total	12,232	100.0	Total	100.0

Source: Own elaboration on the basis of AQU.

But this distribution is moderately heterogeneous if we consider it in terms of

universities, educational itineraries and simultaneity between study and work (to

broaden this aspect, see Planas & Fachelli, 2009).

4. What is the occupation of graduates in comparison to that of their parents?

First and foremost, it is important to highlight graduates' high employment rate,

since 2008 rate of unemployment of graduates from Catalonian universities in 2004

was only 3.1%.

It is interesting to remember that the sociological literature has traditionally taken

the occupation of the head of household or, in general, male workers' occupation

as a basis to stratify society. One of the most prolific lines of work on this subject

has been the contribution by John Goldthorpe and his colleagues from the Nuffield

College, Oxford. This author considers that the occupation of a job position is a

quite suitable indicator to evaluate the individual's social position.

Based on this background, we decided to take the two elements into account, i.e.,

to use occupation as an indicator of stratification and to avoid a sexist

classification. In this way, we differentiated groups of workers among them, and

specifically, we selected the father's or the mother's maximum occupational status

in order to analyze the main characteristics of university students' families.

Therefore, the classification was established into 5 categories as detailed below:

1. Employee: Management

2. Employee: Senior Technician (including free-lance work requiring university

studies)

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3. Employee: Skilled worker

4. Self-employed worker: Does not require university studies

5. Employee: Unskilled worker

Table No. 3 shows the results.

Table No. 3: Parents' maximum occupational level.

Parents' maximum occupational level	Cases	%	Occupational status	%
Employee: Management	1,894	15.7		
Employee: Senior Technician	1,523	12.6	High status	35.3
Self-employed worker: Requires university studies	840	7.0		
Employee: Skilled worker	3,849	31.9	Medium	31.9
			status	
Self-employed worker: Does not require university	2,493	20.7		
studies	,		Low status	32.7
Employee: Unskilled	1,453	12.1		
Total	12,052	100.0	Total	100.0

Source: Own elaboration on the basis of AQU.

The distribution of the occupational status of graduates' parents is grouped into three almost equal parts. But this distribution varies, though not too much, if we consider it according to universities, educational itineraries and simultaneity between study and work (see Planas & Fachelli, 2009).

In this case, what interests us most is the comparison between graduates' occupation and that of their parents. There are many papers on the relationship of parents' and children's occupations through traditional studies on social mobility. These theories have been developed as a part of the great approaches to stratification in industrial societies, and among most outstanding authors we currently find Goldthorpe and Erikson, who have analyzed social mobility in contemporary societies.

In general, occupation, as we have mentioned before, has been the most widely used indicator to determine social class, and the first element to determine the individual's status within social structure. The concept of profession or occupation is considered to be more comprehensive and accurate than income (Hernandez de Frutos, 1997, p.153). Despite the notoriety of this kind of analysis, these occupation indicators have been widely applied only to man, making room for a "... reductionist identification between social mobility and male mobility, the most immediate consequence of which has been the practical invisibility of the female half as a subject of study" (Salido Cortés, 2001, p. 43).

In order to follow tradition in this type of analysis, but avoiding sexist biases, our work focuses on considering the highest occupation level, either of the father or of the mother (Fachelli, 2009).

In general, the more categories the base information has, the more interesting the analyses resulting from this type of information organization (transition matrices). Since our information on the parents has been reorganized into five categories in the previous paragraph, we have decided to follow the same procedure with the children.

To compare children with their parents, children (either male or female) were classified under the same headings as their parents in relation to their occupation.ⁱⁱ Furthermore, in order to avoid the difficulty of comparing between graduates who work part-time and those who work full-time, we selected graduates who had an occupation at the moment of making the survey and who have full-time jobs. They add up to 80% of the total sample.

4.1 Relative positions of parents and children

In general terms, the following table shows the relationship between children's and parents' occupation. Thus, we can note the proportion of graduates who perform tasks of the same level as their parents' and also those whose tasks are of a different level from their parents' tasks, whether of a higher or a lower hierarchy. The result presented below shows all graduates who have full-time occupations.

Table No. 4: Graduates' occupation compared to their parents' occupation.

	University graduates who have full-time occupations									
Parents' maximum occupational status	Management	Senior Technician	Skilled worker	Self- employed worker	Unskilled worker					
1 Management	6.0	1.8	6.8	0.7	0.3					
2 Higher Technician	6.2	2.4	8.6	1.1	0.6					
3 Skilled worker	9.5	4.4	15.5	1.0	1.3					
4 Self-employed worker with no university										
studies	6.4	2.9	10.0	1.3	0.8					
5 Unskilled worker	3.7	1.3	6.3	0.4	0.7					

Source: Own elaboration on the basis of AQU.

A great number of university graduates, although they are in their first professional insertion, are already in higher positions than their parents, who, due to their age, are in the final stage of their professional career. From the total of graduates, 50.8% (which is obtained by adding all the percentages on the left and lower boxes of the table) already perform tasks of a higher hierarchy than that of their parents.

In turn, 25.9% performs tasks similar to those carried out by their parents (addition of the diagonal) and 23.3% still performs tasks of a lower hierarchy (right and upper boxes of the table).

It is interesting to highlight that the insertion of the graduates we are analyzing is early; therefore, they have a long road to travel in their professional career and, in many cases, this fact will imply an occupational promotion of graduates who will tend, in an even higher proportion than nowadays, to surpass the occupational positions of their parents.

If the observation is made by gender, men carry out tasks of a higher hierarchy than women although differences are small (52.4% and 49.8% respectively).

Table No. 5: Graduates' occupation by gender according to their parents' occupation.

Parents' maximum	V	orking	female g	graduate	Working male graduates					
occupational status	1	2	3	4	5	1	2	3	4	5
1 Management	4.8	1.8	7.2	0.5	0.4	7.6	1.9	6.2	1.1	0.3
2 Senior Technician	5.5	2.0	9.6	0.9	8.0	7.3	3.0	7.3	1.5	0.4
3 Skilled worker	8.3	4.4	17.4	0.7	1.6	11.3	4.3	12.7	1.4	1.0
4 Self-employed worker with										
no university studies	5.9	2.9	11.2	1.1	8.0	7.1	2.8	8.1	1.5	0.8
5 Unskilled worker	3.5	1.2	6.7	0.3	0.7	4.0	1.4	5.6	0.5	0.7

Source: Own elaboration on the basis of AQU.

Consequently, women are overrepresented in tasks of a lower hierarchy. For instance, men who perform Management tasks, in comparison with their parents who are Senior Technicians or Skilled Workers, reach 18.6%, while in the case of women this percentage decreases to 13.8%.

On the other hand, if we observe the occupations above the diagonal (tasks of a lower level than those performed by their parents), women represent 24.2% as a whole, while men represent 22%.

The proportion of women and men who perform tasks of the same level as their parents is similar (26% and 25.6% respectively). In both cases, the higher rate is found in skilled tasks (17.4% for women and 12.7% for men). Finally, men have a greater presence than women in higher positions (10.6% against 6.8% for Management and Senior Technician positions).

4.2 Children's occupation in relation to their parents' occupation

If we make a reading considering parents' occupation as an indicator of the family origin of the university graduate, we obtain the following results:

Table No. 6: Graduates' occupation compared to their parents' occupation

	University gra-	duates who h	ave full-tir	ne occupation	ons	
Parents' maximum occupational status	Management	Senior Technician	Skilled worker	Self- employed worker	Unskilled worker	Total
1 Management	38.0	11.7	43.4	4.8	2.2	100
2 Senior Technician	32.6	12.7	45.4	6.0	3.3	100
3 Skilled worker	30.0	13.7	49.0	3.2	4.2	100
4 Self-employed worker with no						
university studies	30.0	13.4	46.7	6.0	3.9	100
5 Unskilled worker	29.8	10.3	51.0	3.0	5.9	100

Source: Own elaboration on the basis of AQU.

1. Management: Taking into account that this is the highest occupational category and consequently, they cannot have an upward mobility, it can be observed that 38% of graduates perform tasks of the same level as their parents, 43.4% perform Skilled tasks and 11.7% perform tasks as Senior Technicians. Very few children are Self-employed workers (4.8%) and only 2.2% carry out Unskilled tasks.

- 2. Senior Technician: Almost 13% of graduates perform tasks of the same level as their parents, while approximately one third surpasses them hierarchically by performing Management tasks. On the contrary, 45% performs Skilled tasks and the rest is distributed between 6% Self-employed workers and 3.3% Unskilled workers.
- 3. Skilled: Almost 50% of graduates perform tasks of the same level as their parents. In turn, 43.7% surpasses their parents in hierarchy, while a little over 7% performs tasks of a lower hierarchy.
- 4. Self-employed (with no university education): In this case, the percentage of children who perform tasks of the same level as their parents decreases to 6%. Excluding almost 4% who perform Unskilled tasks, the remaining 90% carries out tasks of a higher hierarchy.
- 5. Unskilled: 6% of children perform tasks of the same level as their parents, and since this is the lowest occupational category, the rest carries out tasks of a higher hierarchy.

If we make the same analysis but differentiating graduates' gender, the results are as follows:

Table No. 7: Graduates' occupation by gender compared to their parents' occupation.

Parents' maximum	Working female graduates					Working male graduates Total				3	Total	
occupational status	1	2	3	4	5	Total	1	2	3	4	5	Total
1 Management	32.9	12.1	49.2	3.3	2.5	100	44.4	11.1	36.1	6.5	1.8	100

2 Senior Technician	29.2	10.7	51.2	4.7	4.2	100	37.5	15.5	37.2	7.7	2.1	100
3 Skilled worker	25.6	13.5	53.8	2.3	4.8	100	36.7	14.0	41.5	4.6	3.2	100
4 Self-employed worker with												
no university studies	27.0	13.1	50.9	5.2	3.8	100	34.8	13.8	40.0	7.2	4.2	100
5 Unskilled worker	28.1	9.7	54.3	2.2	5.8	100	32.4	11.3	46.0	4.2	6.1	100

Source: Own elaboration on the basis of AQU.

Upon observing this situation by gender, relevant differences appear. From the total of sons from parents who are Managers, 44% occupies the same place and this percentage decreases to 33% in the case of daughters. This situation is compensated with a greater proportion of women having qualified positions (50%) versus 36% of men.

Senior Technicians' sons perform Management tasks in a higher percentage (37.5%) than daughters from the same family origin (29.2%). Men whose place of origin coincides with that of their parents are over 15%, while women are approximately 10%.

Skilled workers' children who perform the same tasks as their parents' are more in the case of women (53.8%) than in the case of men (41.5%).

If we observe the category of parents who are self-employed workers with no university education, we see that the percentage of children who surpass them in occupations of a higher hierarchy is similar for men (89%) and women (91%).

Children who perform the same Unskilled task as their parents are approximately 6% for both genders, and since this is the lower category, the remaining 94% occupies higher categories.

Finally, it seems reasonable to conclude that the university would be giving tools for the positioning of graduates in places hierarchically higher than those occupied by their parents and that the influence of parents' origin from the point of view of occupation on the child's occupation is not very important.

5. Conclusions

The results of this paper is based on the data obtained through a survey among individuals graduated from the university in 2004 in connection with their professional insertion, their occupation, and their parents' occupation and level of education in 2008.

First of all, we wish to highlight the high employment rate of graduates, since unemployment rate in 2008 of graduates from Catalonian universities in 2004 was only 3.1%.

From data analysis made by us, two results are particularly relevant with regard to the social function of Catalonian universities.

First, in relation to the level of education of university graduates' parents, we can affirm that: a) most students graduated from the university in 2004 are the children of people who have no university education (70%); b) among them, graduates who come from families with an elementary or lower level of education constitute a relative majority (40% of the total) among surveyed graduates, c) there are very few differences between the opportunities of access to university degrees for the children who come from families having an elementary or lower level of education and those who come from families with secondary education; d) university graduates' children, although at present are a minority at the university, still have

many more access opportunities than those who come from families with no higher education.

The second result we wish to underline is the high upward occupation mobility of graduates in comparison to that of their parents, and that it is a comparison between one generation, that of parents, who are at the end of their professional career, and another one, that of children, who have just started theirs. We observe that the university system is making it possible for most graduates, only 4 years after having completed their studies, to have occupations hierarchically higher than their parents'. In connection with this aspect, we do not find significant differences in the marks upon admission to the university and the average mark shown on the graduates' academic record (Planas & Fachelli, 2009).

This phenomenon is also reflected in the fact that graduates who occupy the highest work positions come from families of very different origins and are distributed in similar proportions among the different social classes to which their parents belong.

Strictly speaking, based on available data, we can only speak about intergenerational occupation mobility and not of social mobility. A true social mobility occurs only when changes are produced in the relative position with respect to their generation, since intergenerational occupation mobility could simply be due to a change of occupational opportunities from one generation to another, that is, structural mobility. Anyway, if this were the case, the fact that most of those who graduated in 2004 have already in 2008 an occupation of a higher level than that of their parents, indicates that their insertion is due, at the very least, to the changes in labour demand and, consequently, to the evolution of social structure.

Therefore, discrimination by social origin is manifested at the university, on the one hand, by the greater relative presence of students whose parents have a high level of education, even though at present, the latter, in absolute terms, constitute a minority; on the other hand, due to the greater presence in short-cycle courses of students whose parents have a low education level and occupational status. Finally, discrimination is also shown by the greater probability to occupy high job positions in the case of graduates whose parents occupy high level positions.

6. Bibliography

AQU (2003) Educació superior i Treball a Catalunya. Estudi de la inserción laboral dels graduats de les universitats públiques catalanes, Agència per a la Qualitat del Sistema Universitaria de Catalunya, Barcelona.

AQU (2007) Educació superior i Treball a Catalunya. Anàlisi dels factores d'Inserció laboral, Agència per a la Qualitat del Sistema Universitaria de Catalunya, Barcelona.

BEDUWE C., PLANAS J. (2003) Educational Expansion and Labour Market – EDEX, Office for Official Publications of the European Communities, Luxembourg.

BOUDON RAYMOND (1983) La desigualdad de oportunidades. Editorial Laia. Barcelona.

CONSELL SUPERIOR DEAVALUACIÓ DEL SISTEMA EDUCATIU (2008) PISA 2006 Resultats del alumnat de Catalunya. Avaluació de la educació secundària obligatòria, Generalitat de Catalunya.

FACHELLI SANDRA (2009) Nuevo modelo de estratificación social y nuevo instrumento para su medición. El caso argentino. Ph.D. thesis. Unpublished. Barcelona.

GOLDTHORPE, JOHN (in collaboration with Llewellyn C. and Payne C.) (1980) Social Mobility & Class Structure in Modern Britain. Clarendon Press. Oxford.

HERNÁNDEZ DE FRUTOS, TEODORO (1997) Las estructuras sociales. Editorial Verbo Divino. Madrid.

MASJUAN, JOSEP M. (2005) Progresos en los aprendizajes, características de los estudios y motivaciones de los estudiantes. Revista Papers Nº 76, pp. 97-133, Universitat Autònoma de Barcelona, Bellaterra.

ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (2007) Education at a Glance 2007. OECD Indicators. OECD Publishing. Paris.

PLANAS J. y FACHELLI S. (2009) Les universitats catalanes factor d'equitat i de mobilitat professional. Una anàlisi sobre les relacions entre el estatus familiar, el bagatge acadèmic i l'inserció professional l'any 2008, dels titulats de l'any 2004 a les universitats catalanes. In print. Barcelona

ROTGER J.Ma (2009) "El sistema universitàri devant laespai de Bolonya" a Subirats M. (coord.) Societat catalana 2009. Associació Catalana de Sociologia. Barcelona.

SALA G. (2007) "Approaches to skills mismatch: a literature review". SKOPE, University of Oxford (working paper).

SALIDO CORTÉS, OLGA (2001) La movilidad ocupacional de las mujeres en España. Por una sociología de la movilidad femenina. Centro de Investigaciones Sociológicas Nº 182. Madrid.

Notes:			

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- ¹¹ 1. Management: Workers under an employment contract who perform managerial duties.
- 2. Senior Technicians: Workers under an employment contract who do not perform managing duties, but, in order to have access to their position, must have a university degree or whose duties require university training. This category includes Self-employed workers, who in order to perform their work must have a university degree or whose duties require university training.
- 3. Skilled workers: Workers under an employment contract who do not perform managing duties, who need not have a university degree or whose duties do not require university training and their work is not an "unskilled" work.
- 4. Self-employed workers: Workers who meet this condition but need not a university degree to fulfil their duties or whose duties do not require university training.
- 5. Unskilled workers: Workers under an employment contract who do not comply with the above conditions and the duties performed by them are "unskilled".