

CONSIDERATIONS ON THE ROLE OF THE SCHOOL IN SOCIAL MOBILITY

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ABSTRACT. The role of the school in the process of status attainment for individuals with different social origins should be analysed both from the perspective of social mobility flows (absolute rates of mobility) and inequality of social chances (relative rates and odds ratios). Inspired by Raymond Boudon's earlier studies in the 1970s, the author scrutinises the complex relationships between expanding access to higher levels of education, social mobility trajectories, and inequality of chances of status achievement in the context of persistent inequalities in contemporary capitalist societies. He concludes that at the societal level, an increase of the dependency of achieved social status on educational qualification will lead to greater immobility if the inequality of educational chances remains constant. At the level of individuals, the same process will lead to greater probability of upward mobility in the case of people with higher levels of educational qualification, and greater probability of downward mobility for those with lower educational qualification.

Keywords: social mobility, education, status attainment, inequality of chances

Introduction

Four decades have passed since I had the privilege to meet professor Raymond Boudon and benefit from his support for my doctoral studies on the relationship between school and social mobility. The choice of the topic was not arbitrary: he had recently published a book (Boudon, 1973a) that rapidly gained attention and appreciation from those preoccupied with the problem of social mobility and remained internationally recognised until nowadays.

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As a young scholar coming from a virtually different world, where one could hardly access information about recent developments in the field of sociology, the topic of social mobility was, for me, entirely novel and I started to explore it with great interest. It became the central concern of my doctoral dissertation (Rotariu, 1977), sustained at the University of Sorbonne. Unfortunately, the study has never been published in French, and only a shorter book-version was printed later in Romanian (Rotariu, 1980). Given that the French original was available to the public only at a Parisian library, and that no second editions were printed in any other language but Romanian, the content of my study was known only by a small group of specialists and seldom cited outside of the borders of Romania².

After obtaining the doctoral degree, I returned to Romania and found myself again in the intellectual environment imposed by the totalitarian regime, which gave no room for my research topic. Thus, I had to shift my attention towards other domains, less sensible to ideological constraints, and decided to focus on methodological issues and the field of demography. My research on social mobility had been interrupted for considerable time, and although after 1990 I returned to its study, by now it no longer represents the principal focus of my research interests. Nevertheless, given that many of the arguments developed so long ago proved out to be still valid, I considered useful to write this short text for the present volume and elaborate on some ideas from my doctoral work in the light of more recent research on the topic.

The Problem of Social Mobility

The study of social mobility constitutes a major preoccupation for sociology, although it no longer occupies the central position it took during the 1960s and 1970s. The stakes of the issue became however increasingly evident as liberal [right-wing] ideologies³ won major battles against left-wing ones. The latter were significantly affected by the failure of Marxism to provide practical solutions for the organisation of economic, political, and social life, solutions that offer alternatives for capitalism, which is essentially based on a liberal view. The salience of social mobility derives from the fact that it is ultimately identical with the problem of *equality/inequality of social chances*, as its scholars frequently remind us. The possibility to move in the *social space*, to use Sorokin's

² A notable exception is Weiss (1986).

³ In the original text in Romanian, the author uses the concept "liberal" in its French meaning, which is closer to the political "right-wing", and differs from the American sense of "liberal" (translator's note).

broad but suggestive metaphor (Sorokin, 1959) is constantly evaluated with respect to individuals' initial social positions. Consequently, social mobility refers to the differences between individuals' trajectories, i.e. different chances to achieve certain destinations when starting-positions differ.

The nature of the problem becomes clear when we study *intergenerational mobility*, in other words when the *initial position* is assumed to be the social status of the family in which the individual was born and socialised, and the *destination* is her/his own social status during adulthood. The word *status* has a general meaning in this context: it might refer to different ways in which the social, cultural, economic, or other situation of individuals or their reference group can be mapped in the social space. In order to locate an individual, the most frequently used variable is the occupational status, considered to imply a certain level of prestige, education, income, relational capital, etc.

Intergenerational mobility means thus the possibility that individuals born and raised in certain social environments will finally attain different social positions; in other words, it evaluates the extent to which starting positions are predictors of destinations, the relative importance of *ascription versus achievement*. When social spaces are hierarchical, and studies of social mobility commonly use such hierarchies, one can say that achieving a superior position is in general desirable. Therefore, if achieved statuses are influenced by original social positions, there will be an inequality of chances between individuals with different starting points.

The inequality of chances is a type of inequality that cannot be as easily justified as some basic inequalities that become evident during processes of social stratification. Basic inequalities consist of mostly inborn interpersonal differences in the possession of certain socially valued characteristics, and they are employed to justify the unequal distribution of individuals on the social ladder. In this sense, hierarchies are seen as having "functional" legitimacy, as being necessary for the good functioning of social mechanisms and of the society as a whole, at least according to the adepts of functionalist theories. However, this argumentation of functionalist theorists cannot justify the inequality of chances and consequently the problem of social mobility remains a major challenge for social scientists.

Left-wing ideologies (Marxism, neo-Marxism, etc.) usually focus on the problem of absolute inequalities and show less interest in the ways in which members of various social classes are recruited. These ideologies essentially blame the phenomenon of social hierarchisation *per se*, the division of societies into dominated (exploited) and dominating (exploiting) classes. To put it shortly, left-wing ideologies militate for practical measures aimed at reducing absolute inequalities, whereas liberal ideologies promote the equalisation of social chances or at least the diminishment of the inequality of chances.

Already during the “classical” period of social stratification and mobility studies, encompassing the 1950s and 1960s, there was a noticeable difference between the approaches of European and North American social scientists. For the former, the social space is defined in terms of *class structure*, where social class position can be identified based on a set of variables, among which occupation is seen as crucial. Although apparently marked by the Marxist ideology, rather influential during that period, this approach cannot be reduced to the Marxist vision, given that it was also embraced by scholars who had no affiliation with that stream of thought. The names of Raymond Aron (France) and John Goldthorpe (the United Kingdom) ought to be mentioned here, the latter being a prominent fellow of the Nuffield College at Oxford, with a well-known contribution to the study of social stratification and mobility during the last decades. Closer to the Marxist perspective are the works of Pierre Bourdieu and Erik Olin Wright, who promoted “European” ideas on the American continent: a proof that the distinction in terms of continental belonging is broadly generalising, giving room to exceptions and unexplained details.

The conception about the nature of social stratification has important implications for the concrete analyses of mobility phenomena. On one hand, every movement in the social space becomes a “leap”, a change of the social status, the crossing of a border, in other words the achievement of a new quality. On the other hand, the social structure ought to possess a certain level of simplicity, the hierarchy must contain only a limited number of classes – usually less than 10-15 possible categories are considered – otherwise the study of the mobility matrix becomes impossible. The main instrument of analysis is the *mobility table*, a quadratic table that contains the positions of origin in the rows and the destinations in the columns. If the social classes are put in a hierarchical order, from the bottom positions to the upper ones, the main diagonal will contain the flows of immobile persons in each class, i.e. those who started from a certain position and ended up at the very same position, and the rest of the cells contain the flows of persons who changed their positions, i.e. the mobility flows or mobility flux. This approach to the analysis of mobility has also considerable implications for the methods employed to measure the *degree (level) of mobility*, both cross-sectionally and longitudinally. It is about estimating the intensity of social mobility, or social fluidity, and describing its changes over time. Implicitly, this refers not only to the directions considered desirable, but also to those predictable within the framework of different theories.

The American approach on social stratification builds on using quantitative variables which measure the positions of individuals according to income, prestige (measured on a score of prestige), education (number of years of schooling) or other variables considered to be responsible for determining

social status, which can be measured on metric scales: interval or ratio scales. Such a representation of the social space leads to the assumption that mobility is a continuous gradual movement from one score to another, a quantitative rather than qualitative change. An act of mobility can be thus measured as the difference between two numerical values, the score of a variable at the starting point and the score attained at destination. The degree of correspondence between the positions on the two scales (origin and destination), in other words the degree of social immobility, is approximated by the coefficient of correlation between the two variables.

The consequence of the above-described approach is that phenomena of social mobility frequently lose their priority in social investigation, becoming part of the larger concern for *status attainment*. The classic model of such research design can be found in the well-known work of Blau and Duncan (1967), which is focused on the relations among a set of variables by using the so-called path analysis. This type of analysis tries to map out the relations of influence (determination) existing among several variables, and to estimate the intensity of direct influences that variables exercise upon each another. Simple correlations coefficients are insufficient for these estimations, given that they encompass both direct and mediated influences. Variables that account for social mobility (e.g. father's occupation and respondent's occupation in Blau and Duncan's study) constitute only one set of the 5-6 variables that enter the path analysis, and thus both direct and indirect influences of individuals' origin upon their destination are measured. Even though the central variable in the model is individuals' status at the moment of the survey (i.e. status at destination), the status of origin is just one of the predictors in the model. Consequently, the relationship between the two variables *per se* is not the central concern of the analysis: the problem of social mobility melts in one of status attainment.

Let us remember that one of the central concerns in social mobility studies is the measurement of the *level of inequality of social chances*, in other words the "degree of mobility" in society. This objective is only an intermediary one in the pursuit to validate different theories, which have in common the assumption that in the second half of the 20th Century Western societies evolved towards reducing the inequality of chances, in other words an increase in social mobility. It is beyond the purpose of this paper to present these theories in detail; however, it ought to be mentioned that empirical evidence does not support the thesis that such an evolution exists. Neither longitudinal studies, which look at the evolution of a particular society in time, nor cross-sectional studies, which compare societies with varying levels of socio-economic development, offered convincing evidence so far that would indicate significant changes in the degree of mobility.

Not all social theorists subscribe to the idea of *the constant flux*, to use the Erikson and Goldthorpe's term (Erikson and Goldthorpe, 1993); several researchers try to give concrete examples that contradict this idea, employing new and more sophisticated statistical tools in order to depict the existence of certain changes and evolutions (most notably, Ganzeboom, Luijkx and Treiman, 1989). In my view, even if modifications in the structure of social mobility over time can be attested, they do not necessarily converge into one concrete direction. Moreover, the extent of these modifications is not large enough to assure that they actually exist, and that they are not only induced by the research design, the modalities in which stratification variables were constructed and measured in different studies across societies over time. To conclude, even if there is progress towards reducing the inequality of chances, *this progress is so small that the results of data analysis are at the limit of statistical significance, and the conclusions that can be drawn hardly pass the threshold of sociological significance.*

This situation can be considered "normal" since the absolute inequality between individuals occupying different positions on the social ladder is evolving. In my view, when trying to explain the inequality of chances, absolute inequalities are often forgotten. Nevertheless, they are not independent from each other, and the former actually derives from the latter. There is inequality of chances in attaining superior social positions because these are preferable in terms of income, power, prestige, types of the labour performed, etc. and their attainment is the result of a social competition in which each individual or family employs the resources at their disposal so as they or their offspring might reach those social positions. Consequently, the larger the discrepancies between starting situations, *ceteris paribus*, the larger those between final situations are expected to be. The bigger absolute inequalities are, the bigger relative inequalities of chances may presumably be found. Studies on social mobility should thus consider the evolution of absolute inequalities as well, among which the easiest to evaluate might be the inequalities in terms of income and wealth.

Although my overview of current literature is far from comprehensive, I would like to mention that numerous studies indicate an increasing social polarisation in developed countries or, at least, the persistence of a certain level of economic inequality (Savage, 2000). Under these circumstances, one might normally expect to find similar patterns of persisting or even increasing inequality of social chances, unless there are certain social mechanisms powerful enough to compensate for the effects of absolute inequalities. However, the existence of such mechanisms is rather unlikely in contemporary developed societies, based on liberal principles of "free-competition" and intrinsically rejecting regulatory measures. The experience of post-socialist countries could be revealing for such

research purposes, given that communist regimes tried to abolish both absolute and relative inequalities by introducing some social criteria for professional (occupational) promotion as well as for access to higher levels of education.

In another order of ideas, it ought to be said that during the late 1970s there was a methodological turn in the empirical studies concerned with the evolution of mobility trajectories, studies which commenced in the 1950s and continue nowadays as well. Until the 1970s, at least in the Europe, these studies aimed at constructing an indicator of “net mobility” (free-, exchange-, or circular-mobility) by controlling for “structural mobility” (or forced mobility) generated by the changes of the social structure between the two moments of the analysis (Boudon, 1973b). The problem of the distinction between structural mobility and net mobility, although essential in order to measure the degree of mobility in a given society, did not receive an adequate solution: although present in theory, this differentiation could not be traced at the level of concrete mobility flows, i.e. at the level of the cells from mobility tables. Consequently, this approach to mobility indexes came to an end and an alternative approach was embraced, based on “relative mobility rates” that indicate “social fluidity”. The ultimate purpose of the analysis remains the same: to determine the association between origin and destination by controlling for marginal distributions, i.e. the changes in the social structure between the two points in time. However, the indicators of association used are the *odds ratios*⁴, meaning the ratio of relative chances to attain a certain position. Odds ratios can be computed for each pair of cells from the interior of a mobility table as the ratio of cross-products of interior frequencies from the cells situated on the same row and column as the given pair. Thus, their computation is based on interior frequencies and not on marginal distributions. Building on odds ratios, log-linear models can be constructed for the analysis of mobility tables.

Although the usage of log-linear models is an evident methodological progress, it has its own limitations that one ought to be aware of. The study of absolute social inequalities revealed that there were many modalities to measure inequalities, every technique leading to different results. None of these techniques is univocally superior to the others. The situation is rather similar, or even more complicated, when relative social chances are evaluated. By

⁴ Let us consider a and b the interior frequencies of a mobility table accounting for the number of individuals having the original social class C_i who attain the social classes C_i and C_j . Correspondingly, c and d are the numbers of individuals who originate in C_j and attain C_i and C_j . The odds ratio in this case is $\theta = a*d/b*c$. It is considered that Leo Goodman introduced this statistical measure at the beginning of the 1970s. In fact, similar measures had already been used before, for example in Kendall's association coefficient, $Q = (a*d - b*c)/(a*d + b*c)$, which can be expressed as $Q = (\theta - 1)/(\theta + 1)$.

replacing mobility indices based on the distinction between net mobility and structural mobility with log-linear models, different aspects of the very same phenomenon (i.e. social mobility) came into light. However, one should bear in mind that results produced by employing different techniques cannot be fundamentally different. If progress were made and social mobility increased, independent of structural changes, less sophisticated tools would most probably reveal that as well.

Education as an Intervening Variable

The most widely invoked representation of the role of the school in social mobility is that of a chain of three subsequent variables: *original status* (O), *educational qualification/diploma* (E), and *achieved status* (S) at a certain point in life. This constitutes a typical descriptive model of the influence of selected variables on an independent (or “response”) variable (S), which aims at revealing the social mechanisms responsible for status attainment. The model also constitutes a way to approach social mobility, given that by introducing both O and E it controls for the difference between O and E, a variable accounting for mobility. The classic reasoning underlying the model is the following:

(1) Individuals start at a certain social position (O) and attain a certain educational qualification (E). Given the disparities between economic and symbolic resources, as well as between value-systems at the social positions of origin, individuals might obtain educational qualifications that correlate with their origins: this is the problem of the inequality of educational changes⁵. At the same time, the school system appeals to many skills and personal abilities that do not depend on the environment in which children were socialised, and therefore the relation of dependency between original positions and educational qualification is not perfect: schools facilitate the access of significant proportions of people with different initial statuses to higher levels of educational qualification.

(2) The level of the educational qualification received (E) is a good predictor of the future social position of the individual (S). In modern societies, the educational system became a very effective means of status allocation. At the same time, there is large consensus over the attribution an increasing role in status attainment to formal education, given that it is regarded as a “democratic”

⁵ The inequality of educational chances is used as an umbrella-term for different theories that try to explain the relative advantages/disadvantages in educational performance of pupils with different social background.

mechanism, seemingly very transparent, which replaces the pre-modern forms of status allocation through *ascription* rather than *achievement*. By allocating social status on the basis of formal education, i.e. the diploma received, the society is considered to gain the virtue of being *meritocratic*⁶.

(3) If social status depends on educational qualification, and educational qualification on original social status, by reducing the inequality of educational chances the inequality of status attainment will be reduced, in other words social mobility should increase.

The above argumentation stood at the heart of expectations of many sociologists from the early decades of social mobility research, predicting the increase of social mobility based on factual data on the expansion of formal education and the presumption of decreasing educational inequality (Boudon, 1973a). However, the results of the empirical research did not meet their expectations. Let us look at two of the potential explanations. First, no social system can be perfectly meritocratic, in none of the senses suggested by our definition. On one hand, no society has been discovered so far where *the dependency between the original social status and the achieved social status of individuals disappears after controlling for their educational qualification*. On the other hand, *it is impossible to achieve a relation of perfect dependency between the level of educational qualification and the social status achieved by individuals*. There are many types of activities that can be undertaken while having different types and levels of educational qualification, and they might lead to various social positions having different prestige or popularity, wealth or income, power or influence etc. Consequently, ascription does play a role in modern societies as well, the economic and symbolic inheritance of an individual matters – although it ought to be added that it matters less than it did in pre-modern times.

However, there is no guarantee that once we reached at the current degree of dependency between individuals' original status and their attained social position, this would remain constant, and one cannot exclude the possibility that it would strengthen or weaken in time. In other words, the influence of schooling cannot replace entirely the influence of social origin because children's intellectual abilities are not always sufficient to convert the

⁶ The term meritocracy is far from being univocal. In the present paper, two of its meanings are concerned. First, a society is "more meritocratic" when, after attaining a certain educational qualification, the status of individuals depends mostly on their diplomas and only to a small extent on their original social positions. In other words, after controlling for educational qualification, the relation between social origins and attained status disappears. Second, a society is "more meritocratic" when the attained social status of individuals is best predicted by their educational qualification. Perfect meritocracy is achieved when social status is fully determined by educational qualification.

resources of their family background in symbolic resources acknowledged by the school, and the latter are not always necessary for attaining a certain social status.

Second, even if assuming that there is perfect meritocracy in the society, i.e. the original social position influences the achieved status only indirectly, through the educational qualification obtained, the conclusion from point (3) remains valid only when *ceteris paribus* is added. A society has higher mobility than another one when it has a lower inequality of educational chances, all other conditions relevant for social mobility being equal. Nevertheless, which are these relevant conditions or factors? One might think of many such factors, and the American literature on social mobility offers good illustrations with respect to this: mother's occupational status (and not only father's), parents' educational levels, ethnicity, religion, area of residence, etc. Even simpler models could clearly highlight what issues are at stake.

Let us measure the intensity of the relationship between two variables with the correlation coefficient r . Under the assumption of perfect meritocracy, in other words of the independence between the variables S and O when controlling for E , we obtain a relationship that can be described by the formula⁷:

$$r_{OS} = r_{OE} * r_{ES}.$$

The correlation between social origin and achieved status, which reflects the degree of immobility, equals to the product of the correlation between social origin and educational qualification and the correlation between educational qualification and achieved status. In this formula, reducing the inequality of educational chances means reducing the value of r_{OE} , whereas *ceteris paribus* means holding constant the value of r_{ES} .

The influence of the coefficient r_{ES} , i.e. the correlation between educational qualification and the social status attained, is equally important for determining the value of r_{OS} (degree of social immobility) as the coefficient r_{OE} (the inequality of educational chances). Unfortunately, mobility studies, as well as theories and explanatory-models of social mobility, often lay the focus only on the former factor, the inequality of educational chances, and give much less attention to or even omit altogether the latter factor, the relation between educational qualification and status. One might seldom find analysis that go beyond superficial generalisations stating that in modern societies the role of

⁷ In the case that r is the Bravais-Pearson correlation coefficient, the relationship can be obtained through the nullification of the partial correlation between O and S , after controlling for E . The formula is valid for association coefficients as well, in other words when variables are measured on qualitative scales, given that the transition matrix (OS) is equal to the product of matrices (OE) and (ES).

education for status attainment is more and more important. In terms of the above formula, this would mean the increase of the coefficient r_{ES} during this period. However, the increase of r_{ES} leads to counter-intuitive results with respect to the degree of social mobility: the more the achieved status depends on education, i.e. the society is more meritocratic in the second sense of this term, *ceteris paribus* the higher the degree of immobility in the society is going to be. In this context *ceteris paribus* means that the coefficient r_{OE} is held constant, i.e. the degree of inequality of educational chances remains unchanged.

The conclusions⁸ of the above argumentation can be easily driven. From the practical point of view, a reduction of the inequality of educational chances can be counterbalanced by an increase of the dependency between educational qualification and achieved status, the conjunction of the two factors leading to a quasi-constant level of social mobility. From the normative point of view, a reduction of the inequality of educational chances has positive consequences on social mobility; the democratisation of education means not only the liberalisation of access to a certain good (i.e. education) of its own right, but also to an instrument of obtaining other goods (in our case superior social status). If societies contain mechanisms that generate inequalities of educational chances, they will be more likely to have great inequalities of social chances when there is meritocracy, in the sense that status attainment largely depends on educational qualification. In such societies immobility will be at its maximum when meritocracy is perfect, i.e. when social status is entirely determined by educational qualification. In this case, when r_{ES} equals one, and $r_{OS}=r_{OE}$.

The level of immobility is equal to the level of the inequality of educational chances. However, the letter cannot attain a maximum level given that the value of the coefficient is far from one. This is true because, as argued before, the school values certain individual characteristics and abilities which are not necessarily induced by the social environment of origin. Thus, educational institutions have a positive role in the generation of social mobility as well.

The ideas outlined above have a crucial importance for social mobility analysis. However, they report only on one of the dimensions of the relationship between school and social mobility, trying to answer the question: How is the degree of social mobility influenced by the degree of inequality of educational chances in a given society? This problem might have several facets: If the inequality of educational chances is reduced, can we expect an increase in social mobility? If access to educational qualification is more democratic, will social

⁸ These conclusions remain valid even in the absence of the perfect-meritocracy assumption (in the first sense of the concept), i.e. when the relationship between attained social status and original position is more complex than the one reported by the model. Perfect meritocracy was assumed only to make a simpler and more transparent argumentation.

chances be more equal? From the practical point of view, this means to look at the variation of two indicators (better to say to sets of indicators) and estimate the extent to which they change simultaneously (analysis of concomitant variations). Unfortunately for social research, societies are too complex to submit to such simple comparisons and it is virtually impossible to secure that all other factors that might influence social mobility are the same in the societies compared. Therefore, the conclusion that indicators of social mobility are not sensitive to the decrease of the inequality of educational chances is not valid.

In another order of ideas, regardless of the formal statistical relationship, it is not difficult to realise that mechanisms of status-attribution based on educational qualification are not independent of the existence of an inequality of educational chances. It is rather utopian to believe that modern societies, however democratic they might be, evolve towards perfect mobility. As argued before, stratification always induces a certain level of immobility produced through social mechanisms⁹ that are well articulated and accepted by the prevailing normative and value-system. If the school system has not only the role to give educational diplomas, but also social statuses, it will become part of the mechanism that reproduces the social structure and fulfil its role exactly through the inequality of educational chances. Thus, it is not reasonable to expect that the inequality of educational chances could be fully eliminated without renouncing at the role of diploma for status-attainment and “inventing” of a new mechanism of status-attribution.

Consequently, schooling is at the same time a mechanism of social reproduction, as Bourdieu and Passeron (1970) argued, and a facilitator of social mobility. These contradictory functions derive from the fact that schools take the role of status-attribution concomitantly with the role of levelling down initial social inequalities by giving a chance of upward social mobility to those who possess inborn abilities and are ready to invest in them. The achieved social status can be thus higher or lower than the status inherited from individuals’ families. The market of educational qualifications becomes a field of confrontation between descendants from families with very different resources. However, obtaining a diploma does not depend solely on the material and cultural resources of the family of origin, but also on individual characteristics which do not necessarily derive from these.

⁹ Although terms such as “mechanisms”, “functions”, “instruments”, etc. might be frequently used in these paragraphs, they serve only as linguistic shortcuts and they do not mean that I embrace the functionalist perspective. These regularities ought to be interpreted as results of individual human action, materialised in rules, institutions, and other forms of organisation and regulation adopted within a certain type of society.

This ambiguity with respect to the role of the school in social mobility permitted social thinkers to give many different and often contradictory interpretations to it. From Bourdieu's point of view, the school is an institution that not only transmits or transfers inequalities from parents to children, but also legitimates these inequalities. From the opposite point of view, that of ultra-optimist liberalism, the school has a decisive contribution to eliminating the inequalities of chances between individuals with different social origins. The truth might be somewhere in the middle, and the complexity of the relationship between the three variables described above (original social position, educational qualification, and achieved social status) might be even larger than it is usually assumed. This is the reason for turning now to other dimensions of the relationship between education and social mobility, which received less attention in the studies on this topic so far.

The Development of the Educational System and Social Mobility

It is known that during the 19th century, but especially during the 20th century, the educational system developed rapidly and the proportions of students at different educational levels sharply increased. After the Second World War, in Western societies registered a real boom in higher education attendance. This development cannot be separated from the processes through which the school was invested with an increasing role in the professional formation of the young generation and in social-status attribution. In this way, demand for formal education increased and, concomitantly, diplomas lost their value. In time, the values of educational qualifications for status achievement significantly diminished. A good example in this respect is the high-school diploma, which in the past used to confer superior social position, especially for middle-class women who might have used it for successful marriage, whereas for the generations after the Second World War high-school diplomas became common and lost their value as university education expanded.

As university-level education becomes mass-education, there is an emergent stratification of higher-education diplomas, and distinctions are traced according to graduating only three-years (or college-level), earning Bachelor's or Master's degree, obtaining the title of Doctor, and engaging in post-doctoral qualifications. This leads to some changes in the formal process of selection and drop out occurs at higher educational levels. However, selection mechanisms remain essentially the same: the educational performance at the previous level to the selection-point (performance which correlates with individuals' social origin). Thus, the social status of the family still influences educational trajectories, regardless of personal abilities and educational performance.

The aim of the above argumentation was to highlight the fact that through the development of the educational system the inequality of educational chances is reduced mainly at those levels at which education becomes available to the masses. Educational inequality is not uniformly reduced at all educational levels. Superior levels remain highly selective, and they can be obtained primarily by those individuals you can cope with the increasing competition and can rely on family resources or other advantages of their social milieu. One should be careful thus to state that educational inequality is decreasing, because it is possible that these inequalities are moving from one point of selection to another. Nevertheless, mass-education clearly makes the educational chances of children with different social backgrounds comparable, at least at basic and medium levels of education.

Let us now turn to the question whether there is a link between the development of the educational system and social mobility *under the assumption that the degree of inequality of chances is held constant*. The reason for raising this question is that, in general, the development of the educational system and the reduction of the inequality of educational chances occur simultaneously and interdependently. However, it is important to estimate the separate effects of each of these two processes on social mobility by controlling for the effects of the other process.

First, one should demonstrate that the two processes do not necessarily accompany each other: it is possible that the educational system develops although the degree of inequality of educational chances remains at the same level. Let us distinguish between only two levels of educational qualification: an inferior level, E_1 , and a superior level, E_2 . The development of the educational system means that the proportion of people having E_2 increases from one generation to the other. The inequality of educational chances ought to be estimated with respect to the original position in the social structure. Let us thus distinguish furthermore between two social classes: a lower-class, O_1 , and a higher-class, O_2 . Based on these two variables, a bivariate distribution table can be constructed for the n individuals, as shown in **Table 1**.

Table 1.

Educational mobility			
Social origin	Educational qualification		Total
	E_1	E_2	
O_1	k_{11}	k_{12}	k_1
O_2	k_{21}	k_{22}	k_2
Total	k_1	k_2	n

Source: Author's illustration.

One of the social inequality measures that can be computed for such tables is the ratio of relative chances, i.e. the odds ratio θ :

$$\theta = (k_{11} * k_{22}) / (k_{21} * k_{12}).$$

The odds ratio has the value 1 (one) when there is a perfect equality of chances, in our case a perfect equality of educational chances among pupils with different social backgrounds. The greater the value of the odds ratio deviates from 1, the higher the degree of inequality of chances. For the present case, the larger the difference from 1, the higher are the relative chances of upper-class pupils versus lower class pupils to attain superior levels of educational qualification. **Table 2** presents a hypothetical situation for 1,000 individuals from the same generation.

Table 2.

Hypothetical situation for an older generation

Social origin	Educational qualification		Total
	E ₁	E ₂	
O ₁	650	50	700
O ₂	150	150	300
Total	800	200	1.000

Source: Author's illustration.

It can be noticed from that half of the individuals with an upper-class background obtain superior levels of educational qualification, whereas only 50 out of 700 individuals from the lower class do that. The value of the odds ratio clearly reflects this inequality:

$$\theta = (650 * 150) / (150 * 50) = 13$$

Let us suppose that as time passes the educational system develops, and for a later generation 300 out of 1,000 individuals obtain the superior level of educational qualification. For the sake of simplicity, let us also assume that the social structure remained the same. It is possible thus to have the distribution from **Table 3**:

Table 3.

Hypothetical situation for a younger generation

Social origin	Educational qualification		Total
	E₁	E₂	
O₁	603	97	700
O₂	97	203	300
Total	800	200	1.000

Source: Author's illustration.

The value of the odds ratio is nevertheless almost the same as in the previous situation:

$$\theta = (650 \cdot 203) / (97 \cdot 97) = 13.05$$

Consequently, although the proportion of those obtaining superior educational qualification increased by 50%, the degree of inequality of educational chances did not change. Other measures of inequality of chances lead to similar results, only the interior frequencies would slightly modify.

The second part of our demonstration concerns the achieved status of individuals. Assuming that the society is meritocratic, at least according to one of the meanings of this term, the social origin does not influence the achieved social status of individuals after they received their educational diploma. In a hypothetical situation, 80% of individuals having lower levels of educational qualification (E₁) achieve an inferior social status (S₁) and 20% a superior social status (S₂). For those having higher levels of educational qualification (E₂), the situation is reversed: 20% attain S₁ and 80% attain S₂. By holding constant this mechanism of social status attribution, social mobility tables can be constructed for the two generations analysed above. For the first generation, the mobility table is presented in **Table 4** below¹⁰:

¹⁰ The figures from **Table 4** can be obtained in the following way: 530 is the sum of 520 (representing the 80% of those 650 individuals having O₁ and E₁) and 10 (20% of those 50 who have O₁ and E₂).

Table 4.

Hypothetical status attainment for the older generation

Social origin	Status		Total
	S ₁	S ₂	
O ₁	530	170	700
O ₂	150	150	300
Total	680	320	1.000

Source: Author's illustration.

The degree of social immobility or the degree of inequality of chances can be estimated with the help of the odds ratio:

$$\theta = (530 \cdot 150) / (150 \cdot 170) = 3.1$$

For the second generation, the mobility table is presented in **Table 5**:

Table 5.

Hypothetical status attainment for the younger generation

Social origin	Status		Total
	S ₁	S ₂	
O ₁	501	199	700
O ₂	119	181	300
Total	680	320	1.000

Source: Author's illustration.

The degree of inequality of chances can be computed as:

$$\theta = (501 \cdot 181) / (119 \cdot 199) = 3.8$$

The results are surprising: *the development of the educational system, conceptualised as an increase in the proportion of those obtaining higher levels of educational qualification, leads to an increase of the inequality of chances in*

status attainment, thus to greater social immobility, when the inequality of educational chances and the relationship between diploma and achieved status is kept constant. Several questions arise from these results: Can these conclusions be generalised? Do these results only derive from the specific hypothetical data used, revealing no more than an outlier case? If the situation were not unique, how could it be explained?

It is not possible to give a comprehensive answer to the first question. The situation is certainly not singular, anybody else could use different numbers and obtain the same results. In my doctoral dissertation from 1977 I have employed different indicators of social mobility, yet I demonstrated the fact that social immobility increased despite of the expanding educational system. Nevertheless, it ought to be mentioned that the results stand only when dichotomous variables are used as indicators of social status and educational qualification. This simplification permits to have a univocal conceptualisation of the development of the educational system as an increase in the proportion of those who obtained higher educational qualifications. When more than two levels of educational attainment are considered, the structural change becomes more complex and difficult to model. Thus, it ultimately requires simplification, and it will focus on a specific level of educational qualification, usually the one comprising the largest proportion of individuals.

The conclusions can be summarised as follows: *During those periods when only small proportions of individuals obtain high educational qualifications, an increase in their proportions leads to a decrease of social mobility, i.e. higher values of the social immobility index. There is a point of inflection of the curve modelling the value of the index, after which the slope sharply decreases, indicating rising levels of social mobility.* The position of this inflection point depends on the social structures at the two moments for which the mobility tables were constructed, as well as on the indicators employed for the measurement of the association between the two variables¹¹.

It is not difficult to find explanations for the above results, and they hold for more complex models as well. The expansion of the educational system is in general understood as the increase in the proportion of people who attain a certain level of educational qualification, from one generation to another. In order to evaluate it, one has to use a certain threshold of educational qualification and estimate what segment of the population reaches that particular threshold, e.g. graduates high-school, obtains a university diploma, etc. Intuitively, one

¹¹ These conclusions were drawn by using a model in which individuals with an inferior social status outnumber those with superior social status. Boudon's domination index was employed to measure the relationship between the three variables: O, E, and S (Boudon, 1973a).

might imagine that the development of the educational system resembles with the opening of a gate which has in front large numbers of people gathered waiting. When the door slightly opens, those positioned close to the gate manage to enter first. Similarly, when the educational system expands, those having the advantage of upper-class social origins will profit first. If the inequality of educational chances and the dependency between diploma and achieved social status are held constant, the latter will obtain proportionately more often higher education diplomas than those coming from families at the bottom of the social ladder, and consequently a higher proportion of them will have superior social statuses. When the gate opens widely, those from lower-class families succeed to enter as well, obtaining thus a diploma of higher education. If the relationship between diploma and status-attainment still stands, a larger proportion of those coming from the lower class will enhance their position on the social ladder, and the degree of social mobility will increase correspondingly.

The analogy might suggest that in order to enhance social mobility the educational system should be expanded. However, the reality is far from being that simple. The model is just a formal scheme resting on certain hypotheses, and the conclusions derive from those specific hypotheses. Going beyond this formal scheme, one might easily realize that the assumption of expanding educational system contradicts the assumption of constant dependency between diploma and status. When large proportions of the population obtain a certain educational qualification, the diploma loses its initial value and cannot grant high-status anymore. The society actually “invents” another point of selection, moves up the threshold of educational qualification above which people attain high-status. If we stick to the initial hypothesis of constant dependency between diploma and achieved status, the outcome will be the modification of the social structure, i.e. larger proportions of people attain higher statuses. In other words, if the diploma does not devalue, the social status it guarantees will devalue! Bearing in mind that social structures are more stable than educational structures, it is plausible to say that the expansion of the educational system leads to the devaluation of diplomas and a further fragmentation of the levels of higher educational qualification, with all its positive and negative consequences.

The Social Mobility of Individuals and their Educational Qualification

New aspects of the relationship between social mobility and education are revealed by moving the focus of inequality of chances analysis from the macrosocial level to the level of individuals. The hypothesis to be tested is

whether individuals with higher levels of educational qualification are more likely to be upwardly mobile, and those with lower levels of educational qualification to be downwardly mobile. The problem seems rather simple, and a straightforward solution consists of constructing an intergenerational mobility table which has as one dimension the level of educational qualification and as the other the mobility pattern of the individual: downwardly mobile, upwardly mobile, or immobile. It is expected to find a high degree of dependency between the two variables.

Raymond Boudon (1973a) draws special attention to the study of C.A. Anderson (1961), a Swedish sociologist who pointed out in 1961 that the analysis of mobility tables based on empirical data from Sweden, France, and the UK do not indicate a degree of association that meets the expectations of the above-stated hypothesis. Boudon called the result, a mobility table with the value of the association measure closer to zero than to the unit, Anderson's paradox.

To illustrate this situation, let me reproduce three tables. **Table 6** was built using the figures presented by Boudon; the data was gathered during an investigation in Stockholm, in 1950.

Table 6.
The association between educational qualification and social mobility.
Stockholm data

Educational qualification	Situation in the mobility table			Total
	Downwardly mobile	Immobile	Upwardly mobile	
Low	12.6	55.1	32.3	100
High	14.8	49.1	36.1	100
Total	13.3	53.1	33.6	100

Source: Author's compilation using data presented by Anderson (1961).

The second table (**Table 7**) can be found in my study from 1977, which used data from a large social investigation of the French Statistical Institute (INSEE) in 1964. Initially, I used seven categories of occupational status and four levels of educational qualification¹². The results were the following:

¹² The classifications employed in mobility studies – the number of categories and their contents – are crucial for the results of the analyses. It can be seen in the present case as well that the more general the categories are, the less visible the association between them is.

Table 7.

**The association between educational qualification and social mobility.
INSEE data, 1964, Rotariu (1977)**

Educational qualification	Situation in the mobility table			Total
	Downwardly mobile	Immobile	Upwardly mobile	
E1 (inferior)	20.2	48.9	30.9	100
E2	16.8	52.1	31.1	100
E3	18.4	35.2	46.4	100
E4 (superior)	12.1	38.2	49.7	100
Total	16.9	48.9	34.2	100

Source: Author's compilation using data presented in his doctoral studies, Rotary (1977).

The third table (**Table 8**) portrays the situation in the UK during the mid-1990s, and it uses data presented by Mike Savage (2000). For the sake of simplicity, I have restructured the tables with four levels of educational qualification and five social classes.

Table 8.

**The association between educational qualification and social mobility.
UK data, mid-1990s**

Educational qualification	Situation in the mobility table			Total
	Downwardly mobile	Immobile	Upwardly mobile	
E1 (inferior)	34.1	48.3	30.1	100
E2	27.9	25.7	46.4	100
E3	19.3	30.8	49.5	100
E4 (superior)	6.9	43.9	49.2	100
Total	25.8	32.1	42.1	100

Source: Author's compilation based on data presented by Savage (2000).

The situations revealed by the above tables are not difficult to describe. The degree of association between educational qualification and social mobility patterns is rather weak in all three cases. Even in **Table 8**, although the percentages increase on the third column and decrease on the first one, the value of the association coefficient is small. Given that both variables are ordinal, Kendall's τ association coefficient can be computed. For the third table, the two Kendall coefficients that can be calculated are equal:

$$\tau_b = \tau_c = 0.17$$

Although these results confirm Anderson's previous analysis, undertaken almost four decades ago, they cannot justify his skepticism towards the influence of education on social mobility. It is a truism to say that the lack of association between two variables cannot be interpreted as the lack of dependency between the phenomena that those variables were employed to indicate. In a similar way, the existence of statistical association or correlation does not imply the necessity of a real relationship. Many debates would have been avoided if a third variable were introduced in the analysis. From another point of view, given that the variables have only a limited number of categories, ceiling-effects ought to be considered: persons coming from families at the top of the social ladder could hardly be upwardly mobile given that there is no superior class position they might ascend to. Correspondingly, persons from with lower-class origins might be categorised as belonging to the very bottom of the social ladder and thus having no lower position to descend to.

In order to shed light on the relationship between educational qualification and the mobility chances of individuals, the mobility tables ought to be constructed not at the level of the whole population, but at that of social classes of origin within that population. As the following tables reveal, in these cases the degree of dependency is closer to the expected level. For example, let us see the situation of *children of routine non-manual workers*, as reported by the reconstructed table (**Table 9**) based on data presented by Savage (2000):

Table 9.
The association between educational qualification and social mobility.
UK data for children of routine non-manual workers, mid-1990s

Educational qualification	Situation in the mobility table			Total
	Downwardly mobile	Immobile	Upwardly mobile	
E1 (inferior)	64	12	24	100

Educational qualification	Situation in the mobility table			Total
	Downwardly mobile	Immobile	Upwardly mobile	
E2	42	29	29	100
E3	10	23	67	100
E4 (superior)	0	10	90	100

Source: Author's compilation based on data presented by Savage (2000).

It can be easily noticed in **Table 9** that among those children of routine non-manual workers who did not obtain higher levels of educational qualification 64% experienced downward mobility and only 24% upward mobility. For those who managed to obtain a diploma of higher education, the chance of downward mobility is virtually zero, and that of upward mobility is 90%! The situation is similar in the case of persons from other social categories of origin as well. In general, the mobility tables for intermediary categories are largely similar with the above-presented one, with high variations on the columns of mobility and, correspondingly, strong dependency between education and mobility patterns. For the categories close to the extremes of the social ladder, the mobility tables present higher degrees of upward mobility in the case of individuals with lower-class origins and higher levels of downward mobility for those with an upper-class background. Furthermore, education is a means for ascending on the social ladder for those coming from the lower-classes (i.e. mobility), and a means to conserve an upper-class position for those coming from high-status families (i.e. immobility). The failure to achieve higher levels of educational qualification generates immobility for those at the bottom of the social hierarchy and downward mobility for those at the top.

In the previous paragraphs, the focus lied on ceiling-effects; nevertheless, the relationship between mobility patterns and educational attainment is much more complex. Let us now turn to those investigations that use quantitative variables in order to evaluate both educational performance (e.g. the number of years of schooling) and social status (e.g. the score on a scale of occupational prestige). In this case, correlation coefficients can be computed, as well as a new variable (M), defined as the difference between the achieved social status and the original one:

$$M = S - O.$$

This relationship can be expressed with the help of the correlation coefficient between educational qualification (E) and social mobility (M). A high value of the correlation coefficient means that those obtaining higher levels of educational qualification are more likely to be upwardly mobile (positive values of S - O); correspondingly, those with low educational achievement are less likely to be upwardly mobile. For the sake of simplicity, only the covariance between E and M will be computed, as it provides the basis for the correlation coefficient. Let us consider n individuals, each having a certain social origin (x_i), an achieved social status (y_i), and a level of educational qualification (z_i). The covariance between education and social mobility is given by the following formula, where the bar above the letter indicates the average value of a given variable:

$$\begin{aligned} \text{Cov (E, M)} &= \frac{\sum(z_i-\bar{z})*((y_i-x_i)-(\bar{y}-\bar{x}))}{N} = \frac{\sum(z_i-\bar{z})*(y_i-\bar{y})-\sum(z_i-\bar{z})*(x_i-\bar{x})}{n} = \\ &= \text{Cov (E, S)} - \text{Cov (O, E)} \end{aligned}$$

The correlation coefficient is obtained by adjusting for the standard deviances of variables, i.e. by dividing covariances to the product of standard deviances of the two variables. It is not necessary to proceed with the actual calculations to understand that, from the statistical point of view, the relationship between social mobility and education can be expressed as the difference between the correlation of educational qualification with achieved social status and that between original social position and educational qualification. Given that both covariances take positive values, we expect that their difference will be close to zero. Without adjusting for the standard deviances of variables, the dependency between educational qualification and mobility increases when the inequality of educational chances is reduced. Similarly, it is reasonable to predict that the dependency between educational qualification and mobility will strengthen when the relationship between diploma and achieved social status is stronger. The latter statement seems to contradict the conclusions of the previous section on the relation between the indicators of inequality of educational and social chances. More precisely, that an increase of the dependency between diploma and achieved social status would lead to the decrease of social mobility (strong association between social position at origin and achieved status), *ceteris paribus*. However, this contradiction is misleading, given that the two statements refer to different things. At the societal level, an increase of the dependency of achieved social status on educational qualification will lead to

greater immobility if the inequality of educational chances remains constant. At the level of individuals, the same process will lead to greater probability of upward mobility in the case of people with higher levels of educational qualification, and greater probability of downward mobility for those with lower educational qualification.

Conclusions

Given the synthetic nature of the above lines, it is unnecessary to summarise the main arguments once again. Additional details and illustrations might provide better insight into the underlying explanations and demonstrations, nevertheless, they would not alter their core. As a concluding remark, it ought to be reminded that the intention of the present paper was to highlight the complexity of the relationship between school and social mobility and warn against any hasty generalisation and commonsensical statements when analysing a social phenomenon so manifold in its dependencies and implications.

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