WHAT WE HAVE LEARNED: RC28'S CONTRIBUTIONS TO KNOWLEDGE

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In our plenary session at the World Congress in Brisbane (10 July 2002), a group of about 40 RC members collectively took stock of the empirical generalizations and conceptual developments that can be traced to the activities of RC28. The session was billed as a discussion of our research agenda for the future, but it quickly became clear that we could not specify a future until we agreed on our past, that is, what we have learned up till now. The exchange was very engaging. Some generalizations and ideas drew assent quickly, but most spawned discussion. Some were nominated only to be withdrawn after the consensus in the room contradicted the nomination. We moved the "MMI" hypothesis from "empirical generalization" to "concept" after several speakers cited exceptions to MMI's predictions but affirmed the usefulness of those predictions as a guide to research.

I was very gratified by the amount and quality of the collective discussion. It was a risk to walk into a room and ask 40 people to assess our collective life with very little prompting. People responded enthusiastically, and all the participants I heard from declared it an interesting and useful exercise. Table 1 (at the back of this document) lists our generalizations and concepts in the order they appeared on the board in Brisbane. I will reorder them in the text to follow to facilitate the flow of the discussion and to add some rhyme and reason that the impromptu listing exercise, by necessity, lacked.

I would like to make our Brisbane session just the first step in a process of taking stock of RC28's store of knowledge. The second step is this communication; here I will put down in greater detail some of the findings and concepts that we spoke of without

¹ MMI refers to the "maximally maintained inequality" hypothesis of Raftery and Hout (1993). More on the substance of MMI will follow.

elaboration in Brisbane. **The third step is up to you**. I hope that each of you will write to me, giving your reaction to what I say (and what I fail to say) here. Whether you were in Brisbane or not, I want to hear from all of RC28. This will ultimately be a document for the whole RC, not just the minutes of our Brisbane session. In the fourth step I will integrate (as well as I can) the discussion that comes back to me in the third round into a single document that we might seek to publish in *Research in Stratification and Social Mobility (RSSM)* or elsewhere.²

The Brisbane session was a very successful experiment in collective communication. I hope that the process can extend to something lasting.

Empirical Generalizations

Occupations Are Ranked in the Same Order in Most Nations and Over Time

At the RC28 meeting in Warsaw (1974), Don Treiman articulated the problems of concept and measurement in the comparative study of mobility and promoted his newly developed cross-national scale of occupational prestige as the solution to both sets of problems (published version: Treiman 1975). In completing the project, he learned – from analyses of 85 prestige studies from 60 countries (13 of them involving replications over time) – that prestige hierarchies were basically invariant through space and time. The correlation between the scores obtained in each study with the standard scale constructed from them ranged from .68 to .97; the average correlation was .91. Treiman subsequently reported these and further analyses in *Occupational Prestige in Comparative Perspective* (1977). In Brisbane I referred to the pattern of invariance as the "Treiman constant." While a cross-national correlation of .91 shows more variation than a true constant might, it is a useful shorthand. Treiman (1977) reported some interesting exceptions and variations involving specific occupations that make the general point.

² The editor would, in all likelihood, make it a discussion paper and seek comment from others.

Subsequent work has extended the case base of this fundamental finding. I know of no study that contradicts it. Work by Ganzeboom and Treiman (1996) extended the findings regarding the prestige of specific lists of occupations to a socioeconomic index (SEI) for all occupations in the 1988 ISCO classification schema. Hauser and Warren (1997) revised, renormed, and validated the American SEI in ways that suggest how an update might well be undertaken for the international standard.

I rank the Treiman constant as first among the achievements of RC28 for three reasons. First, the RC was instrumental in encouraging the conduct of national prestige studies, in promulgating standards that would make the studies comparable, and in disseminating the results. Second, the Treiman constant is indispensable to the line of research that understands occupational achievement and social mobility in terms of moves through a finely differentiated and vertically ranked occupational space (as distinct from class analysis; see the exchange between Hout and Hauser [1992] and Erikson and Goldthorpe [1992b]). In particular, parameters relating socioeconomic destinations to socioeconomic origins would have little or no meaning if the rank ordering of occupations differed significantly from country to country or time to time. The universal ranking pattern motivates this line of research and gives it meaning and coherence. Finally, the Treiman constant may be the only universal sociologists have discovered – not just in stratification but sociology as a whole. Demographers find some regularity in the age patterns of fertility and mortality, but both vary more over time and place than the rank ordering of occupations does. Criminologists refer to a highly regular pattern relating age and criminal activity but shifts in the age distribution can account for only a tiny fraction of change in the main parameter of interest - the absolute frequency of crime. In contrast, the slight variations in occupational ranking are trivial compared to the regular patterns established by dozens of RC members and codified by Treiman (1977).

Occupational Distributions Are Gendered

Men and women tend to be segregated into different occupations and into different jobs within occupations and workplaces. This by now commonplace observation is more

taken for granted than demonstrated in the work of the RC. We have had, since the mid 1980s, dozens of papers detailing the gender segregation in different countries. Significant work has gone on outside the RC, too (Roos and Reskin1984; Baron and Bielby 1984; Hakim 1992). The systematic survey of cross-national variation by Charles and Grusky (1995) was first reported to the RC in Prague 1991. Charles and Grusky identified several different profiles of gender differentiation that reflect the rate of growth of service employment, the education of women, and the availability of part-time work. Just as important as their catalog of differences is the implicit finding that there are no universals when it comes to gender stratification. Societies differ from one another and over time in the outline and specifics of occupational segregation.

The gender difference in occupational destinations is in sharp contrast to the necessary absence of gender difference in social origins and the much more contingent (but usually observed) absence of gender difference in the association between origins and destinations. All classes have boys and all classes have girls. Unless some classes practice selective abortion or infanticide while other refrain from these practices or do less of them, each class will produce the same share of the male population as it will of the female population. If origins affect the odds of working, we could conceivably see a correlation between gender and origins in a mobility study. ³ Usually, however, researchers report no difference between men's and women's origins. Likewise most studies report no gender difference in the association of origins with destinations. Thus the gender difference in occupational destinations is not only the main source of gender differences in mobility, it may well be the only source.

Social Mobility Exhibits a Common Pattern But Varies in Strength Across Nations and Over Time

The original RC was founded in 1950 with the express purpose of standardizing mobility data and analysis. The founders' goal was to quantify cross-national differences in

³ Hout (1988) argued that the absence of such a correlation in US data for 1972-1985 indicated that he needed no correction for selectivity in his comparison of men's and women's social mobility.

social mobility. Glass, Svalastoga, and others mostly had the impression that their nations differed markedly as social mobility reflected the history, economy, politics, and demography of each nation. The first systematic compilation of results, however, contradicted those expectations. Lipset and Zetterberg (1956) reported to the Third World Congress in 1956 that the rate of mobility (between white collar and blue collar occupations) in the 12 national mobility studies (9 nations) that they were able to assemble varied little – variation among nations was about the same as across different studies from the same nation. Mobility from farm to either blue collar or white collar destinations differed according to the relative sizes of the three categories, but what came to be known as the "Lipset-Zetterberg hypothesis" was generally understood to be a conjecture that non-farm mobility rates were invariant. In italics, they proclaimed (Lipset and Bendix 1959, p. 13):

The overall pattern of social mobility appears to be much the same in the industrial societies of various Western countries.

They went on to say "Since a number of the countries for which we have data have had different rates of mobility and of expansion but show comparable rates of social mobility, our tentative interpretation is that the social mobility of societies becomes relatively high once their industrialization, and hence their economic expansion, reaches a certain level" (Lipset and Bendix 1959, p. 13). Lipset and Zetterberg never tested the statistical significance of the variation they found, they merely asserted the lack of substantive significance in the range of differences they uncovered. They also took note of the rank of US mobility amidst the assembled nations. Many observers up to that time had supposed that the US had exceptionally high rates of social mobility - owing, among other things, to the lack of an inherited aristocracy in US history. Lipset and Zetterberg found no basis for thinking that American mobility was exceptionally high. Subsequent analyses using tests of statistical significance have uncovered significant differences, contradicting Lipset and Zetterberg (e.g., Garnier and Hazelrigg 1976; Grusky and Hauser 1984). More importantly, differences among nations reflect political and historical variation, thus overturning Lipset and Zetterberg and confirming the conjectures of Glass, Svalastoga, and other RC founders (Grusky and Hauser 1984).

While the first round of mobility studies was compiled from various sources collected for various purposes, several scholars undertook national mobility studies in the early part of the 1970s. These were almost all focused on mobility questions from the beginning and several of them were conducted with an eye toward cross-national comparison. In the late 1970s several RC members set out to standardize and compare these data sets under the collective name of the CASMIN project (comparative analysis of social mobility in industrial nations). In preparing their data for the CASMIN project, Featherman, Jones, and Hauser (1975) undertook a two-country comparison of Australia and the USA. They found – and reported at the RC28 meeting in {Warsaw? / Rome? - that the two countries had substantially different mobility rates due to different patterns of farming, manufacturing, and services, but they shared common relative mobility rates. That is the association between origins and destinations, as revealed in a loglinear model that controlled for cross-national differences in the distribution of origins and destinations, was the same in both countries. From their twocountry comparison they advanced the bold conjecture that mobility will differ but the association will be the same in nations with a market economy and a nuclear family system (Featherman et al., 1975, p. 340). This came to be known as the FJH hypothesis and the model it implied – the loglinear model of no three-way interaction in the three-way table of origins by destinations by nation - came to be known as the model of "common social fluidity" or "CSF" for short.

The first test of the FJH hypothesis by Erikson, Goldthorpe, and Portacarero (1979) compared England, France, and Sweden. They found that the association between origins and destinations in England and France was very similar – barely statistically significant in a test involving 20,000 observations – but that the association in Sweden was significantly weaker. Over the years, Erikson et al. (1982, 1987a, 1987b; with an intervention by Hauser 1984a, 1984b) refined the analysis, but the principal finding stood: England and France were nearly identical and Sweden was more open. As countries were added to the CASMIN caseload, they were judged by the English-French pattern – which came to be called the "core" pattern. The German mobility pattern exhibited more closure (Müller 1985) as did the Irish (Hout and Jackson 1986); the Dutch pattern differed little from the Swedish (Ganzeboom and De Graaf 1984), and

the Hungarian pattern also exhibited substantial openness although communism ruled out the self-employed destination. Erikson and Goldthorpe (1987ab) brought all of these data sets together (and added Scotland, Northern Ireland, and Poland to the analysis) in two papers that introduced their core model and its national variations. Their main conclusion was that the countries differed in the strength of association (or, inversely, openness) but that they exhibited a strong similarity in the pattern of association. In 1992 they introduced the "unidiff" model (Erikson and Goldthorpe 1992a; also see Xie 1992) that expressed this idea formally as a log-multiplicative model and found that their revision of FJH could not be rejected.

Several interesting countries could not be fitted within the CASMIN scheme because the unit-record occupational coding scheme could not be reconciled with the CASMIN standard one. Australia, Japan, and the USA, in particular, were left out of the core analysis. Czechoslovakia and Italy were too because their data became available too late. Yet analyses by Erikson and Goldthorpe (1992a) indicate that the fundamental conclusion of *The Constant Flux* is validated by these cases. To the extent to which they can be compared with the other countries they appear to differ only in the strength of association, not in its basic pattern. Indeed, as far as Erikson and Goldthorpe could tell, Australia and the USA closely resembled Britain and France – more closely than any of the CASMIN nations did. Kerckhoff et al. (1989) also concluded that the American and British mobility was very similar and that the association between origins and destinations was the same in the two nations. Japan more nearly resembled the stronger association of origins and destinations that characterized Germany (also see Ishida 1993; Ishida, Erikson, and Goldthorpe 1991).

At the same time, researchers following Hauser's (1984) lead began to apply "vertical" models to the CASMIN data (Ganzeboom et al. 1989; Hout and Hauser 1992; Wong 1992). They, too, found a common pattern that differed only in the strength of association. The class and vertical perspectives on mobility were quite distinct. The class view – championed by Erikson and Goldthorpe – emphasized differences of kind among occupational categories. These differences are rooted in the employment relations that typify wage work on a simple labor contract compared with service

relations that entail owners trusting managers and professionals to act in the interest of ownership and cultivating this by tying compensation to the long-term health and vigor of the enterprise rather than to the hours spent working last week. The vertical perspective notes the even grading of prestige assessments, pay scales, and annual incomes. They see occupations as differing in degree rather than kind. Work within the RC has not resolved the disputes between these points of view. And work that has attempted to adjudicate the dispute have found a balance of evidence that favors neither and prefers a mixed model that includes elements of each approach (e.g., Hout 1989, ch. 5). Most importantly for present purposes, though, the two points of view both support the conclusion that mobility patterns – whatever they are – differ among nations only in strength, not in type. Furthermore, the relative ordering of nations from most open to most closed is nearly identical (compare Erikson and Goldthorpe 1987b with Hout and Hauser 1992).

Many nations have been added to the pool of countries under study since the CASMIN study was completed. Spain (Rodriguez Menes 1993; Salido 1999), Switzerland (??), Austria and Czechoslovakia (Haller et. al. 1990), Denmark (Hansen 1998), Finland (??), Norway (Ringdal 1994, 2001), Canada (de Seve 1998; Wanner and Hayes 1996), Israel (Goldthorpe, Yaish and Kraus 1997), China (Cheng and Dai 1995; Wu and Treiman 1999), Taiwan and South Korea (Phang and Lee, 1996), Russia (Marshall et al. 1995; Gerber and Hout 2002), Slovenia (Ganzeboom et. al. 2000), Brazil (Wong 1992; Costa Ribiero; Scalon 1999), others? And replications within countries have established that the pattern remains the same even if the trends point to change (Hout 1988; Ganzeboom et. al. 1989; Breen and Whelan 1996; Shizzerotto and Pisati 1998; Ringdal 2001).⁴

In a very real sense this is the major intellectual accomplishment of the RC. The Treiman constant is essential and unique; that is why it is listed first. But finding a common pattern of social fluidity has been a collective endeavor. Far more RC

⁴ Change almost always goes from less to more open. The only exceptions in the literature are Bolivia (Kelley and Klein 1977) and Russia (Gerber and Hout 2002).

members have participated in these mobility studies than in the prestige studies. And they came to the task with very different priors. The discipline of interacting with one another and communicating research results to a community of scholars that shared the larger goal of getting the results right but who differed in how to approach that goal added rigor. The intense debates and exchanges - face-to-face and in print - that marked the late 1980s and early 1990s identified the weak points in all arguments and advanced the collective endeavor. The debates and multiple sessions no doubt tried the patience of some RC members who did not share the mobility researchers' the fascination with the fine points of the debates. For our part, those of us engaged in the debates developed too many code words that obscured from many the substance of our concerns. Nonetheless, it was invaluable to the participants and to our search for reliable knowledge that there be a community of scholars that would host the debates, participate in testing the hypotheses, and agree to live by the results. In the end neither the class nor the vertical perspective won outright. But the research in each tradition points to the same conclusion. Some countries have relatively open class structures and/or hierarchies that are readily breached by upwardly mobile persons from less privileged origins; other societies are relatively closed to intergenerational mobility. These are differences of degree but not kind.⁵

Education Is the Main Factor in Both Upward Mobility and the Reproduction of Status from Generation to Generation

This is the central finding in Blau and Duncan's seminal book, *The American Occupational Structure* (1967), replicated by Featherman and Hauser in *Opportunity and Change* (1978), and extended to other countries by several authors, most notably Treiman and Ganzeboom (1990; also see Hope 1985; Hout 1989; Ishida 1992). Prior to Blau and Duncan's specification of the attainment process, it was generally thought that

⁵ The Marxist class approach (e.g., Wright 1997) shares with Erikson and Goldthorpe a concern with discrete social relations of production but begins with a Marxist theory, derives an appropriately different set of classes, and applies its own models. Despite the foundational differences, the Marxist

the two propositions were contradictory and mutually exclusive. Education must either promote mobility or reproduction. But within the formal model of their path analysis, it is rather easy to see how education – due to its central role in occupational achievement – can foster both mobility and reproduction. Figure 1 simplifies the Blau-Duncan model in a way that emphasizes its essential parts. Variation in education comes from two sources: social origins (*X*) and all those things that are independent of origins (*u*). The portion of education's variance that comes from origins contributes to reproduction; the portion that is independent of origins contributes to mobility. Education is the main factor in the intergenerational reproduction of social standing because the product *ac* is greater than the direct effect of origins (*b*). But education is also the main factor in upward social mobility because the product *uc* is greater than *ac*. The variation in education that is independent of social origins contributes more variance to destinations than the portion of variation in education that comes from origins does.

Figure 1 about here

This once-central question about how social stratification works has – somewhat mysteriously – received less attention recently than the other mobility questions have. And we certainly have nothing like the base of cross-national comparisons to draw on for making generalizations. In part, the variety of educational systems in Europe (not to mention globally) intrudes. Many of them are not as easily rendered as a simple uni-dimensional score. Hodge and Duncan (1963) were the first to specify this approach. They got great mileage out of the simple convention of scoring peoples' educational attainments according to the number of years of schooling they successfully completed. The relatively undifferentiated school system in the United States invites this kind of scoring, occasionally augmented with a dummy variable for taking vocational courses, and it captures the key aspects of educational differences (see Blau and Duncan 1967,

approach also concludes that mobility has a common pattern (with differences in strength of association) across nations (Western 1994; Western and Wright 1995).

⁶ If b > ac, then direct reproduction would be more important than indirect reproduction by way of education and the generalization would be rejected.

pp. 144-5, 165-6; Jencks et al. 1972; Arum 1998). Educational systems elsewhere differ in ways that are not well-captured by the time spent earning the credential (see Shavit and Müller 1997). Some people spend more time gaining a less valuable credential than others spend gaining a more lucrative one. The labor markets of these societies are tailored to these distinctions and so employers usually look only for the relevant credential – the wrong credential no matter how valuable in other contexts – can have no value to some employers.

The CASMIN educational stratification scheme (König et. al. 1988) facilitated some research of this type (e.g., Ishida, Ridge, and Müller 1990), but it is only a partially ranked set of distinctions and not reducible to a single score. Several useful models facilitate the analysis of qualitative variables. But few of these methods extract a single parameter of the sort common to path analysis. More daunting, most methods for qualitative dependent variables standardize the error variance, ruling out estimating u as an independent parametr. Without a single parameter equivalent to c and without an estimate of u, it is impossible to compare ac with uc. And without the comparison between ac and uc, researchers cannot address the question of reproduction versus mobility with the same efficacy that Blau and Duncan achieved.

That cannot be the whole story. Difficulties of measurement and scoring exist in other subfields that nonetheless have vigorous research agendas. A lot of very high quality and important research in educational stratification has been done in the last 35 years. The issue cannot be the unresolved issue around getting the right scalar to plug in for *c* or *u*. There must be less interest in the decomposition itself.

Let me make the case for why it is important and worth reviving. My concern is with the legitimacy of educational institutions themselves. In *Schooling in Capitalist America*, Bowles and Gintis argued that schools not only reproduce the class structure, they legitimate inequality by turning advantages of birth into legitimate achievements.⁷

⁷ Indeed it was Sam Bowles (1972) who first drew attention to the relation ac > b to emphasize their point. And it was in his reply to Bowles that Duncan (1972) noted that uc > ac implies that education does more to promote mobility than to reproduce advantages.

While it works out in the United States so that the product of the effect of origins on education and education's subsequent effect on destinations is outweighed by the variation in education that is independent of origins, there is no reason to think that the balance will tilt that way everywhere. As a research community we can contribute to discussions of this issue with our comparative perspective if we take it as seriously as we have a number of other issues.

Trends in Educational Stratification Favor Women

Men born before 1930 attained far more education than did women born about that time. This male educational advantage began to abate in most industrialized countries around the end of World War II as women born in the 1930s narrowed the education gap (a remarkable development considering that men's educational attainments were rising faster than ever in most countries). Women born from 1940 onward continued to move ahead more rapidly than their brothers and other men were moving. In some nations, women born in the 1970s have achieved more education than men born in the 1970s have. This finding first appeared in the RC papers that contributed to *Persistent Inequalities* edited by Yossi Shavit and Peter Blossfeld (1993). Experts in the various countries were aware of the trend in their country of interest, but it was Shavit and Blossfeld who first identified how general it was.

The descriptive result is widely appreciated. The RC has not kept up with this trend however, and few members have endeavored to explain it. A useful project in the near future would take up the challenge of explaining educational gender parity and reversal. Fruitful explananda might include rising returns to market work among women (and men in some but not all countries), the educational and occupational aspirations of post-feminist women, the family resources of smaller families, and the interests of privileged parents who have daughters but not sons.

Educational Tracking Increases the Variance of Educational Outcomes

Educational researchers within the RC and elsewhere have devoted significant time and resources to documenting educational differentiation and its consequences (variously

known as tracking or streaming). Researchers differ on whether the effects of tracking are, on balance, positive or negative, but they do seem to have reached a consensus that the more differentiation that gets built into a school system, the more differentiation comes out. Schools where all students study the same subjects with the same intensity have less variance in educational achievement test scores and labor market outcomes than we see in schools that teach different students different subjects or the same subjects with different intensity.

It would seem from that generalization that the consensus of the RC is that schools should homogenize their curricula. But that is not the implication that most researchers draw from their work. Gamoran et. al. (1995), for example, argue that streaming that maps onto the local labor market can produce useful variation in outcomes while what might be thought of a superfluous differentiation can have harmful effects on young peoples' career prospects and their prospects for higher education.8 Arum (1998) showed that what he called "substantive" vocational education can increase some peoples' life time earnings by completing their training in secondary school – saving them from having to spend time taking substantive vocational courses in community colleges. Lucas argued in Tracking Inequality (1999) that schools that ended explicit tracking but continued to offer a variety of courses actually increased the correlation between origins and educational outcomes because the students of collegeeducated parents better understood the connection between specific courses and the opportunity to attend college than did the students whose parents had not been to college. Under the old tracking regime, the "college preparatory" label on some courses gave students the information they needed whether their parents had attended college or not.

⁸ Adam told the session that a Scottish radio show host sniped at his nuanced answer to a "thumbs up or thumbs down" question about streaming in Scottish secondary schools as a "typical academic's answer."

Dissention in the Ranks

Two ideas were initially floated as generalizations that might be included, but enough contrary findings were cited to nix including them. First was MMI – the maximally maintained inequality hypothesis put forth by Raftery and Hout (1993). It was shifted to a conceptual contribution so I will explain the meaning of MMI in the next section. Here I will just note that the American case does not fit MMI (Hout, Raftery, and Bell 1993), and the Netherlands, Sweden, and France show evidence of declining class barriers even though the advantaged classes have not reached "saturation" (Ganzeboom and Nieuwbeerta 1996; Jonsson and Mills 1993; Vallet 2001) – negating a key element of MMI.

The other was the proposition that educational expansion leads to educational differentiation. Secondary and higher education in the United States conform to this pattern, but several initially complex small systems – such as that in the Netherlands – have simplified as they have taken on ever-larger fractions of recent cohorts. Institutional isomorphism or some other generalization probably explains these changes better than the idea that size fosters difference.

Conceptual Developments

The contributions of the RC have not been limited to empirical generalizations accumulated over many studies. Some of our most significant ideas have come from the development or refinement of concepts that have reoriented thinking about a subject or provided a focus for further research. The FJH hypothesis and the companion concept of common social fluidity properly belong in this category. But as they are so closely integrated into the empirical generalizations about mobility patterns that they have been fully discussed already. We do have four other critical conceptual developments to our credit.

Modernization Theory Is Wrong

Many founders of the RC shared a view of social life that now goes under the rubric of "modernization." The idea is that the succession of social structure from primary to

secondary to tertiary production – from foods stuffs to manufactured goods to services – brings with it myriad other changes. Among these are the supplanting of ascription with achievement (and the attendant disappearance of particularism in the face of universal norms) and the tendency for work roles to become narrower and more specialized.

The results of the research committee have called these ideas into question. Essays by Goldthorpe (1964) and Treiman (1970) challenged this paradigm over 30 years ago. The intervening research record will show few trends that accord well with the modernization theorists. The hardest observation for modernization theory to survive is the oft-repeated finding that the Scandinavian countries and the Netherlands have less inequality and more openness than more modernized nations like Britain, the United States, and Germany. The Social Democratic political project has allowed those countries to attain greater equality of outcomes and opportunities than their more fully modernized neighbors and competitors. Further confounding the modernization theorists is the modernization catch-up those countries achieved after adopting Social Democracy. The total lack of trends in Britain through Labour's centralizations and Thatcher's dismantling also calls the modernization thesis into question.

Class Affects Educational Transitions Differently

Rob Mare (1980) noted that the association between origins and destinations arises through a process that is composed of many steps. At any step along the way from the beginning of schooling till ultimate school leaving, class or status can come into play in the decision to continue or to stop – a decision that could, in principle, be made either by the student or the school. Ultimately the correlation between origins and education is the (nonlinear) accumulation of these local effects of origin on each transition. Boudon (1974) had previously argued for disaggregating the educational attainment process into its constituent steps, but it was Mare who specified the aggregation / disaggregation most fully and explicitly.

This conceptual shift altered how RC members studied education and led, eventually, to the Shavit and Blossfeld volume (1993). First launched at the Utrecht meeting of RC28 in 1989, the Shavit-Blossfeld project involved an explicit protocol

whereby each participant adopted Mare's conception of the educational process and produced a set of calculations that could be compared (by the editors) across cases. The protocol specified that all participants divide the available data into birth cohorts, compute the effect of origin on years of schooling as a baseline, and calculate the effect of origin on (as a minimum) three transitions: entry into secondary education, completion of academic secondary education (conditional on entry into secondary education), and entry into college or university (conditional on completion of academic secondary education). Participants were also to take account of differences in trends for men and women, immigrants and natives (where relevant), and majority and minority groups (where relevant). Each national report was to describe the major educational institutions and provide some historical background. We presented initial results at the Madrid meeting at the 1990 World Congress and further revised our papers over the next two years.

This model of accumulating comparative results accompanied by details about its context was instrumental in spawning other projects on school-to-work transitions (Shavit and Müller 1997), self-employment (Müller and Arum 2002), and origins and destinations (Breen and Luijkx 2001).

Maximally Maintained Inequality

Adrian Raftery and I (1993) put forth the hypothesis that privileged groups have interest in their own children's success but little or no interest in the existence or size of class differentials per se. Thus, we supposed, class barriers will persist as long as some highorigin individuals do not successfully attain some educational threshold, but that privileged parents will not take action to limit the achievements of other peoples' children once all of theirs have attained the goal. We stated our hypothesis in the context of an analysis of Irish educational stratification, but we were prompted to make it by the British case. Halsey, Heath, and Ridge (1980) had noted that the reforms in British education had failed to bring down class barriers. We thought – and we might

⁹ In Brisbane, Rob said that this is true "by definition" but I do not see how.

have gotten the idea from them – that a crucial factor in the persistence of educational stratification in Britain was the low rate of university attendance by the British middle classes prior to the reforms. Thus the reforms did not make available to poor people goods that the middle class already had in abundance, it made scarce goods more available to all classes. We figured that the class barriers would not come down until the middle classes were satisfied.

Some subsequent research has supported MMI; some has contradicted it. It never fit the US case well (Mare 1980; Hout et al. 1993; Lucas 2001). The decline of class barriers in Social Democratic regimes challenges it. MMI, like the FJH hypothesis of constant social fluidity, nonetheless is a useful baseline for assessing each case. It continues to orient research. It does well on its home turf in Britain and Ireland. It makes sense of the Italian case whichever way the abandomento debate is settled (Schizerotto and Pisati 1998; Shavit and Westerbeek 1998) and of the Russian case in which class barriers to higher education rose after all classes saturated secondary education (Gerber and Hout 1995; Gerber 2000).

School-to-work Transitions Are Conditioned by Institutions

The Shavit-Müller school-to-work project was organized around Rosenbaum and Kariya's (1989) research into the communications between secondary school placement counselors and human resources people at prospective employers. They described how counselors and HR people developed relationships of trust and information that guided the school-to-work transitions of Japanese secondary school leavers. Müller immediately saw the parallels in German work credit practices, and these ideas then helped organize both the research each author did and the sense that Shavit and Müller, as editors, made of the cross-national patterns of similarity and difference.

Conclusion

This exercise has challenged and energized me. It has made me think through some issues that have been latent in my thinking for years and awakened me to new ideas. I hope that it does the same for you.

I am immensely proud of my affiliation with RC28 and our collected and collective accomplishments. I look forward to your comments, corrections, and additions. Please feel free to correspond by email or post.

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Table 1

Empirical Generalizations and Conceptual Advances Nominated by the Assembled Research Committee: Brisbane, 10 July 2002

A. Empirical Generalizations

Treiman constant

{MMI}

Expansion increases differentiation in education

Common pattern in mobility; differences are in strength

Education is the prime mover in intergenerational reproduction; it is also key to upward mobility

Occupational destinations are gendered

Gender differences in educational outcomes are disappearing and, in some countries, reversing to women's advantage

Tracking increases variations in educational outcomes

B. Conceptual Developments

Disaggregation of educational attainment (Mare model)

School-to-work involves institutional context

MMI

Modernization theories are wrong

Strong version of class theory is wrong

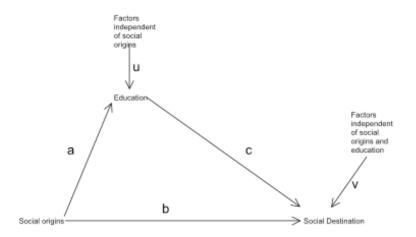


Figure 1 Simplified Path Diagram of How Destinations Depend on Origins and Education