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'Margin Insensitivity' and the Analysis of Educational Inequality*

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Abstract: A problem in educational attainment research is that measures of association, and not measures of inequality, have been used to observe inequality in the distribution of higher education between classes. While the statistical association between class and education in many countries has been relatively stable, measures of inequality applied to the same data show a marked reduction of inequality in the distribution of higher education over time. This is a result of reduced bias in the allocation mechanisms, most likely facilitated by the increasing provision of higher education. Decreasing inequality means that the conclusion in the literature that egalitarian educational reforms have been ineffective lacks empirical support. One reason why measures of inequality have been overlooked in most educational attainment research may be the firm but unfounded belief in the 'margin insensitivity' of loglinear measures. They are assumed to capture the association net of changes in the marginals of the class-by-education table, thus reflecting the 'true nature' of the allocation mechanism in recruitment to higher education. This notion can be shown to be a logically untenable deduction from the property of loglinear measures of being insensitive in relation to one specific kind of change in the marginals, to the claim that these measures are insensitive to marginal changes in general.

Keywords: social inequality, inequality of educational attainment, loglinear measures, measures of inequality, margin insensitivity
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Introduction

All societies exhibit systematic inequalities in the access they provide social groups to privileged positions and attractive goods. This finding, discussed under the terms social stratification and class inequality, is one that may qualify as a law in social science. Moreover, it has been shown that these inequalities are passed on from generation to generation through biases in the processes of allocation that favour the offspring of privileged parents, in what is called the social reproduction of inequality.

The education system plays a key role in the allocation of attractive positions and goods in modern society. Higher education can be regarded as a good in its own right, and possessing it opens up access to rewarding occupational positions. At the beginning of the 20th century, higher education was mainly available to the children of well-off parents. But with the expansion of higher education in the second half of the century an increasing number of children from less privileged social groups were given access to institutions of higher learning. However, according to prominent researchers in this field, this did not reduce the class inequality in educational attainment. The dominant view is that the extensive egalitarian reforms of the school system in this period failed to achieve their goals. However, this view has been challenged. According to critics, there has in fact been a remarkable reduction of class inequality in access to higher education. These conflicting conclusions, drawn from empirical analyses of the same data, depend on the choice of statistical measures for comparing class-by-education tables at different points in time. Linear and loglinear measures of association show stable social differences in access to higher education. In contrast, measures of inequality show that social differences are decreasing.

My interest in the question of how to measure inequality in educational attainment stems from my discussions with Professor Stein Ringen on my visit to Oxford University in the autumn of 1992. What struck me when he told me of his misgivings about the conclusions drawn in the class inequality literature was that a debate within my own field of political science was highly relevant to the problem. In 1981 William Lafferty wrote a book [1981] criticising the conclusions reached by Willy Martinussen in *The Distant Democracy: Social Inequality, Political Resources and Political Influence in Norway* [1977]. Martinussen had concluded that political participation in Norway was heavily skewed, and that the lack of participation by less privileged groups contributed to preserving social inequality. Lafferty claimed that the differences between the groups were far too small to talk about socially biased participation.

My contribution to the debate was to point out that a criterion for judging whether a difference in participation should be regarded as large or small is how it affects the social composition of the participants [Hellevik 1983]. If we look at an activity in which only a minority participate, for example, being a member of a political party, the existence of a gap of ten percentage points, say between 10%

participating in one class and 20% in another, results in a highly skewed distribution of members across classes. The same gap of ten percentage points would have a much less adverse effect on the representativity of voters if the participation levels in the two classes were, say, 80% versus 90%. The distribution across classes for voters would be 53-47% compared to 33-67% for party members (when the classes are of equal size). In other words, the higher the participation level, the less an absolute difference or gap in participation between the groups affects the social representativity of the participants.

This view has not met with any opposition in the debate among political scientists. But in research on educational attainment, many scholars evidently believe that loglinear measures somehow control for differences in the level of participation. These measures are believed to be 'margin insensitive', capturing the association net of changes in class composition and educational provision. This belief has been a major obstacle to reaching an agreement in the debate on how the class-education relationship has developed. The purpose of this paper is to show that the idea of margin insensitivity is unfounded.

Below I will give an example of how the same empirical data can be interpreted differently depending on which statistical measure is chosen to describe them. I will then proceed to take a more general look at the properties of three main classes of measures: linear and loglinear measures of association, and measures of inequality. I challenge from several perspectives the notion that loglinear measures are suited to capturing bias in the allocation mechanism, and that such bias is something other than inequality of the distribution of higher education across classes captured by inequality measures. First, I argue that the basic premise, the assumed margin insensitivity of loglinear measures, is untenable, and then I explain why loglinear measures are not suited to capturing bias in allocation mechanisms. Loglinear measures are not as different from linear measures of association as is commonly assumed, and they give nonsensical results for allocation bias once the level of educational provision is high. By using sampling procedures as models for recruitment to higher education, I will demonstrate that it is measures of inequality, rather than loglinear measures, that capture the bias of the allocation mechanism.

Persistent inequality?

In Table 1 British data is used to illustrate the dramatic divergence of results for different classes of statistical measures. The statistical measures (except the Gini coefficient) are calculated from the proportion of people in three social classes that are enrolled in higher education, and the development over time is captured by making these calculations for four consecutive birth cohorts. The 'raw' proportions for each class are shown in the upper rows of the table, followed by rows for each statistical measure. The first of these – the proportion difference (PD)

between the upper and lower classes – is a linear measure of association, and shows stable values at around 0.4 for the first three cohorts, and a little less for the fourth cohort. The same impression of stability also holds for loglinear measures of association, the statistic preferred by researchers in this field.

From these and similar findings of a stable association over time, most people studying higher education recruitment have concluded that class inequality has remained unchanged. And because social inequality persists despite educational reforms aimed at reducing inequality, the empirical results have been taken as proof that these egalitarian reforms have been ineffective. In the introduction to a publication presenting studies from thirteen different countries, Blossfeld and Shavit state:

> In sum, despite the marked expansion of all the educational systems under study, in most countries there has been little change in socioeconomic inequality of educational opportunity. [Blossfeld and Shavit 1993: 19]

> Finally, the impact of educational reforms on changes in educational stratification seems to be negligible. Nowhere have they reduced inequalities of educational opportunity between socioeconomic strata. [Ibid.: 21]

But as pointed out elsewhere [Hellevik 1997, 2000, 2002; Ringen 1997, 2000, 2005, 2006], and as shown in Table 1, a very different picture emerges when the same data are analysed with a measure designed to capture inequality in the distribution of a good. The participation ratio is a simple measure of inequality, found as the ratio of the proportion of people with higher education in one group to that in another group. The table shows the ratio for the lower versus the upper class, which varies between 0 and 1.[1] This may be taken as a measure of equality, with the maximum value of 1 implying complete equality. Because high inequality corresponds to strong association, an 'inequality coefficient' (IC) is defined as 1 – PR. According to this measure, from the first to the last cohort the inequality has been nearly halved.

A more complex measure of inequality is the bivariate version of the Gini coefficient – the so-called coefficient of concentration – which measures the degree to which a good (in this case higher education) is concentrated across a population grouped according to a different variable (in this case social class).[2] The coefficient is calculated by comparing the cumulative distribution of places in higher

[1] This is of course provided that the proportion for the lower class is below or equal to that of the upper class.

[2] The groups are ranked according to their advantage ratio (the proportion of the good divided by the proportion of the population). See Lambert [1993] for a formal exposition of the Gini-coefficient of concentration. The calculation of the coefficient for this table is shown in Hellevik [1997] and Ringen [1997].

Table 1. Class and educational attainment: measures of association and inequality

	Birth cohort			
	1930–39	1940–49	1950–59	1960–69
Proportion of the pop. with higher education				
Upper class, P_U	0.58	0.67	0.84	0.87
Middle class, P_M	0.31	0.46	0.58	0.74
Lower class, P_L	0.18	0.27	0.42	0.54
Linear association				
Proportion difference $PD = P_U - P_L$ (= linear b)	0.40	0.40	0.42	0.33
1930–39 = 100	100	100	105	83
Loglinear association				
Lambda = ¼ ln $OR_{U/L}$ (= ¼ logistic b)	0.46	0.43	0.49	0.42
1930–39 = 100	100	93	107	91
Inequality				
Participation ratio $PR = P_L / P_U$	0.31	0.40	0.50	0.62
Inequality coefficient IC = 1 – PR	0.69	0.60	0.50	0.38
1930–39 = 100	100	87	72	55
Gini-coefficient	0.24	0.20	0.15	0.10
1930–39 = 100	100	80	60	44

Source: Hellevik [1997], based on British data used in Heath and Clifford [1990].

education across the three classes in the table with the classes' cumulative share of the population. The more the distribution of higher education is concentrated among the upper class, the closer to 1 the result for the Gini-coefficient will be.[3] If every group gets a share of positions in higher education in direct proportion to its share of the population, the Gini-coefficient is 0. The reduction shown in Table 1, as we move from older to younger cohorts, indicates that the distribution of places of higher education across classes over time becomes closer and closer to the distribution of the population. Or to put it another way, the social composi-

[3] A problem not considered here is that the grouping of cases implies that the Gini-coefficient of concentration has a restricted range; it cannot reach 1 [Leege and Francis 1974]. The range of the coefficient becomes increasingly restricted as the upper class's share of the population increases. However, this is of no relevance to the discussion of trends in Table 1.

tion of those members of the population attaining a higher education becomes steadily more representative for the entire population.[4]

An alternative interpretation of what has taken place in the education system in the past century is that the importance of class for the probability of attaining a higher education remains strong throughout the period. In a path-analytic framework, this would be interpreted as a strong and stable causal effect of class on education. But the decrease in inequality measures tells us that a rising level of education in the population and a stable association between class and education jointly have produced a steady reduction in the degree of inequality in the distribution of higher education across classes.

Three types of measures for the class–education relationship

At this point it may be useful to take a more general look at the properties of the three kinds of statistical measures used to describe the contents of the class-by-education table: linear measures of association, loglinear measures of association, and measures of inequality. Figure 1 compares how the three measures behave in a hypothetical scenario, in which the provision of higher education increases – which is the historical trend – while the linear association between class and education remains stable. In Figure 1, the PD (the absolute difference in proportions) is kept constant at 0.20. The PD is identical to the linear regression coefficient in the bivariate case. It varies between a minimum of 0, when the proportions are identical, and plus/minus 1 for maximum association, when the proportion is 0 in one of the groups and 1 in the other. The interpretation is straightforward as it shows the absolute difference or gap between two classes in the probability of obtaining higher education.

The loglinear measures, here represented by the Lambda coefficient, cannot be given such a simple and intuitively meaningful explanation. The Lambda is defined as one-quarter of the logistic regression coefficient, which in turn is the natural logarithm of the odds ratio; this is the ratio between two odds, each being a ratio between the proportion having and the proportion not having obtained a higher education. The reason for using the Lambda in the figure is that its results are usually identical to or just slightly higher than those of the PD for the same

[4] In the panel debate at the RC28 meeting in Brno, Samuel Lucas, in objecting to the use of the Gini coefficient, made the point that the Gini is scale sensitive. The results differ if the dichotomous education variable is coded 1 and 2, 1 and 3, or 12 and 13. In the analysis presented here, the Gini reflects how places of higher education are distributed between classes, and the coding chosen for the education variable does not enter into the calculations. The objection of scale sensitivity does not seem relevant in this case. If, instead of looking at whether a good is obtained (dichotomy), the *amount* of a good obtained, such as education measured in years of schooling, is considered, then the analysis is of a different distribution; therefore, differences in the results are to be expected.

empirical data. When the proportions compared are close to the extremes of 0 or 1, the Lambda will show much higher values than the PD, approaching plus/minus infinity. If instead the Lambda is kept constant, for example, at 0.20, this would produce a figure showing the Lambda as a horizontal line and the PD as a curve starting out from values close to 0 when the provision is low, climbing to 0.20 for medium levels of provision, and again sinking towards 0 as the provision of higher education approaches 100%.[5]

The 'inequality coefficient' (IC) used in Figure 1 is defined as 1 – PR. The 'participation ratio' is simply the ratio between the proportions obtaining a higher education within two classes. (PR may accordingly also stand for the proportion or probability ratio.) It has also been called the disparity ratio [Saunders 1996]. The PR is identical to another measure of inequality, the ratio of advantage ratios.[6]

When the lowest proportion is used as the denominator of the fraction, the PR varies between 0 (minimum equality where none of the good goes to the less fortunate group) and 1 (maximum equality where the two proportions are equal). The IC accordingly acquires the value 0, where there is no inequality, and 1, where inequality is at its maximum.

The horizontal axis in Figure 1 may be interpreted as a time axis, with an increasing provision of higher education over time. The linear PD and the log-linear Lambda are identical or close in value when the proportions compared lie within the range between 0.25 and 0.75, but show divergent results when the proportions approach the extreme values of 0 or 1, where the loglinear effects are much stronger than the linear ones. Starting out from proportions with a higher education near zero, the loglinear measures behave similarly to the inequality measures as the provision increases.[7] The Lambda shows a decreasing association, and the Inequality Coefficient shows decreasing inequality.

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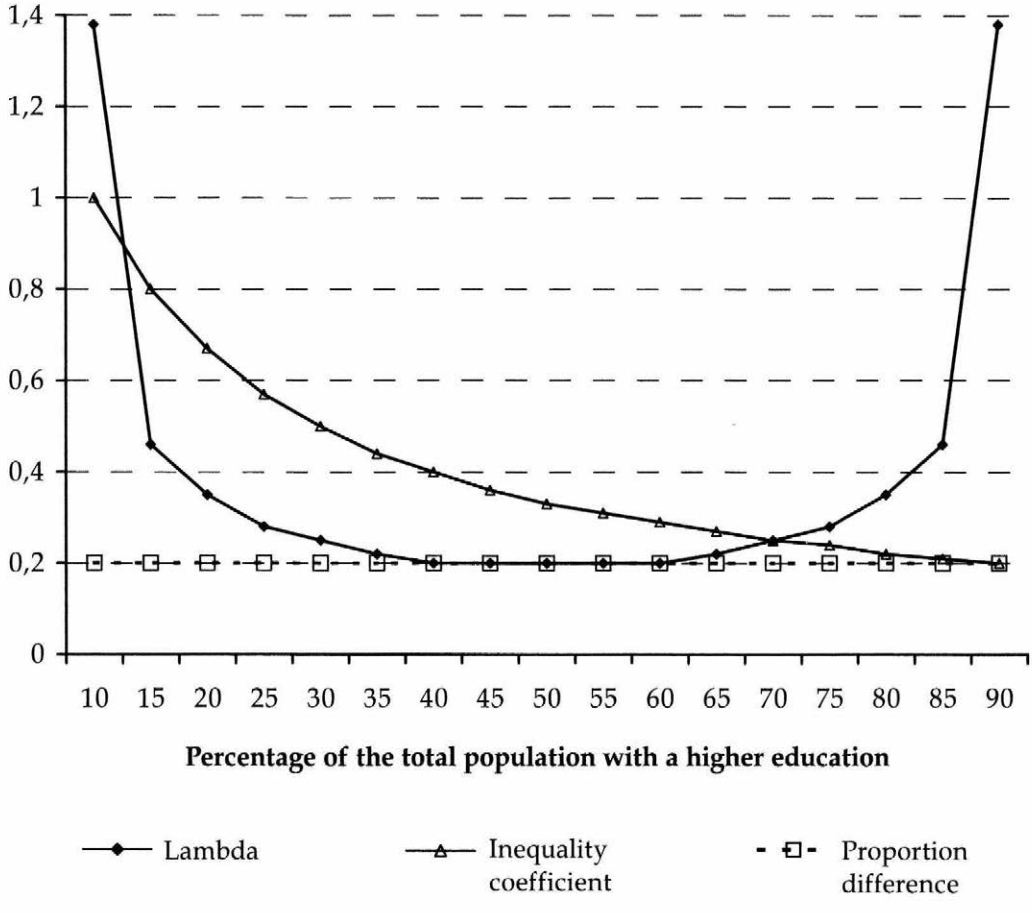
[5] The PD can be expressed as a function of the Lambda: PD = Lambda *4P(1-P); or – as in Figure 1 – the Lambda can be expressed as a function of the PD: Lambda = PD / 4P(1 – P), where P is the average for the proportion with a high value on the dependent variable (a high education) for the two groups.

[6] The advantage ratio is the proportion of a good obtained by a group, divided by its share of the population, in our case the proportion of positions in higher education obtained by a class, divided by its population share. A ratio of more than 1 indicates a privileged situation, a ratio below 1 correspondingly an underprivileged position. The closer to 1 the RAR – the ratio between these two ratios – is, the more equal the distribution of higher education. The formula for the $RAR_{L/H}$ based on Table 2 is: [b/a+b) / (b+d)/N] / [a/(a+b) / (a+c)/N] = b (a+c)(a+b)N / a(b+d)(a+b)N = [b/(b+d)] / [a/(a+c)] = P_L / P_U = $PR_{L/U}$.

[7] The OR is in fact sometimes described as the ratio between probabilities, or the PR. However, this is not correct in general. What the OR shows is the ratio between odds, not between proportions. But when the proportions are small the results for the OR are similar to the ratio of proportions. In epidemiological research, use is therefore sometimes made of an interpretation of the OR, referred to as relative risk. 'The odds ratio ... approximates how much more likely (or unlikely) it is for the outcome to be present among those with $x = 1$ than among those with $x = 0$. For example, if y denotes the presence or absence of

Figure 1. The Lambda coefficient, the 'proportion difference', and the 'inequality coefficient' for comparisons of two groups of equal size, with different levels of provision of higher education (proportions for the binary dependent variable in the two groups lying respectively 0.10 above and 0.10 below the total population level)



However, this parallel in the trends of the loglinear and inequality measures ceases when we move past the midpoint of 50% of the population with a higher education and approach 100%. There, according to the Lambda, the association rises, while the IC continues to drop. When, respectively, 80% and 100% of the

lung cancer and x denotes whether or not the person is a smoker, then ψ [OR] = 2 indicates that lung cancer occurs twice as often among smokers than among nonsmokers in the study population' [Hosmer and Lemeshow 1989]. However, in analyses of survey data, where the phenomena studied often occur more frequently, this interpretation may be misleading.

population in the two classes obtain a higher education, the Lambda exceeds 1, while the IC with a value of 0.2 reaches its minimum value, given that the gap between the two groups is fixed at 20 percentage points.[8]

The reason for the difference in results is that the loglinear measures, in contrast to the inequality measures, treat the two extremes as identical. For the Lambda it is of no consequence whether the level for higher education is 10% or 90%. For measures of inequality, however, there is a fundamental difference in meaning between 10% or 90% having obtained the good in question.[9]

Also, changes in the class composition of society may affect inequality. Unlike both the linear and loglinear measures of association, as well as inequality measures such as the IC or the PR, the Gini coefficient is also sensitive to changes in the class marginal of the class-by-education table [Hellevik 1997].

The current debate

A source of disagreement among students of educational attainment has been the question of what causes class inequality. One position is that class differences in success rates reflect 'unfair' practices. In their efforts to obtain a higher education, the lower classes are somehow hindered by various discriminatory practices to which the metaphor of 'the loaded dice of social opportunity' alludes [Halsey 1977: 184]. An alternative interpretation is that the inequality in educational attainment is caused by differences in abilities and efforts [Saunders 1996]. Yet another explanation refers to differences in educational preferences [Murphy 1981, 1990]. The question of causes is of course a very interesting one, but it is not addressed in the Ringen-Hellevik critique of the persistent inequality thesis. Here the issue is how to analyse the class-by-education table, assuming that all those present in the table have the motivation and ability to obtain a higher educa-

[8] To calculate the OR and the Lambda in the extreme case, the proportions 99.9 and 79.9 at one end of the axis and correspondingly 20.1 and 0.1 at the opposite end of the axis were used, which gives a Lambda of 1.38.

[9] An objection to the inequality coefficient was raised at the RC28 Brno meeting by Lois-Andre Vallet, who pointed out that the trend for the results of the inequality coefficient will be different if, instead of higher education, we look at the distribution of lower education. However, this should not be considered a paradox or a problem. If we calculate the proportion ratio for low education, by taking the ratio of P_{Upper} / P_{Lower} (the upper class in this case being the 'underprivileged' one), the curve will show a pattern exactly inverse to that of the PR for higher education. In other words, the less inequality in the distribution of higher education, the more inequality we get in the distribution of lower education. In the latter case, the horizontal axis shows a declining provision of lower education from left to right. The change in tendency is thus a consequence of the change in the distribution under consideration, either that of higher or lower education. For measures of inequality it is the distribution of the preferred position, in this case higher education, that is the focus of interest.

tion. Such an assumption seems to underlie much of the educational attainment research.

New research on the relationship between class and education has found that it is no longer a stable relationship, and according to a recent review, in several countries there are now trends of a decreasing association between class and educational attainment [Breen and Jonsson 2005].[10] This of course weakens the persistent inequality thesis and implies an even steeper reduction in inequality according to inequality measures. However, whether the class-education association is in fact stable or decreasing is of no consequence for the disagreement over how inequality in educational attainment should be measured.

Ringen [1997] and Hellevik [1997] are not the first to have suggested that measures of inequality be used to describe inequality in educational attainment. Among earlier examples are Glennerster and Low, who found decreasing advantage ratios for privileged groups and a corresponding increase for the underprivileged in Britain, concluding that '... the reforms of the 1960s, are having their effect in the 1970s and 1980s' [1990: 76]. Another example is Saunders [1996], who uses what he calls a disparity ratio. This, as mentioned above, is the same as the proportion ratio. Saunders finds that this ratio shows a decline in class inequality over time in Britain.

Of particular relevance to the topic of this paper is John Logan's criticism [1996] of the use of the concept of 'margin insensitivity' in mobility research. His arguments, which I will return to below, seem thus far to have been overlooked by students of class inequality. The same must be said of the Ringen-Hellevik critique. The review by Breen and Jonsson [2005] of recent developments in this field does not mention alternative approaches to measuring inequality and the consequent divergence in results. In a debate in *Acta Sociologica* there was an exchange of opinions between Marshall and Swift [1999, 2000] and Kivinen, Ahola and Hedman [2001, 2002] on the one hand and Ringen [2000] and Hellevik [1997, 2000, 2002] on the other. There have also been other contributions to the debate critical of the use of loglinear measures to describe inequality [Lampard 2000; Marks 2004]. The debate at the May 2007 meeting of the Research Committee on Social Stratification and Mobility of the International Sociological Association (RC28) in Brno, Czech Republic, provided an opportunity for further exchanges on this matter.

The answers Marshall and Swift [1999, 2000] gave in *Acta Sociologica* seem to accept that the distribution of higher education among classes has indeed become less unequal. But they propose that inequality of distribution is just one particular kind of inequality. Another and more interesting kind is captured by loglinear measures. They claim that the loglinear association approach is supe-

[10] In the panel debate at the RC28 meeting in Brno, this point was made by Michael Hout, who also made several references to older publications reporting reduced association and criticised Ringen and Hellevik for not being sufficiently acquainted with this literature.

rior because it captures something essential – namely, the bias in the allocation mechanism itself – a bias that appears to be highly persistent over time in most countries. The basis for this claim is the idea that loglinear measures are 'margin insensitive'. Criticism of this idea was restricted to an endnote in my first article [Hellevik 1997: 394]. My experiences from the debate so far have convinced me that the disagreement concerning the special properties of loglinear measures is a core issue, making it difficult to reach an agreement with regard to the status of inequality in educational attainment.

The idea of margin insensitivity

When either the provision of higher education or the class composition of society changes, this supposedly does not affect the association shown by the loglinear measures. These measures are said to capture the effect 'net of' such changes in the marginals of the class-by-education table, thus reflecting the 'true nature' of the allocation mechanism. The pattern of stable association and decreasing inequality is accordingly interpreted as a result of a stable allocation mechanism working within a changing framework of increasing provision.

In his seminal article on the idea of margin insensitivity in the analysis of class and educational attainment, Mare writes: 'Under the logistic response model, differences in background effects, either over school transitions or over cohorts, cannot result from changing marginal distributions of either independent or dependent variables because such changes do not affect the [loglinear measure]'. Since the loglinear measures are 'invariant under changes in the marginal distributions of the variables', they give 'true effects' [Mare 1981: 75]. Similar statements abound in later contributions to the educational attainment literature: 'In addition because the Mare model is based on the odds ratio, which is insensitive to marginal distributions, the parameters of the model are unaffected by aggregate expansion or contraction of the educational system' [Breen and Jonsson 2000: 758]. 'This [logit analysis] will ensure that we focus on measuring the mechanism behind the distribution of education across class backgrounds – our estimates will not be confounded if there is an overall increase (or decrease) in the general transition probabilities' [Erikson and Jonsson 1996: 75]. The loglinear measures are described as 'margin free' [Grusky and Tienda 1993: vii], and as 'revealing the "pure" association between origin characteristics and educational attainment' [Breen and Jonsson 2005: 225]. The use of the loglinear model is hailed as a methodological breakthrough, making it '... possible to specify the intrinsic association between variables after purging out nuisance variability in marginal distributions' [Grusky and Tienda 1993: vii].

The idea of margin insensitivity seems to have emerged from a statistics textbook [Bishop, Fienberg and Holland 1975], which is the only reference given in central texts such as Mare [1981: 74] and Erikson and Goldthorpe [1992: 56].

Table 2. Class and education: row and column multiplication by, respectively, X and Y

	Before multiplication			After multiplication		
	Upper class	Lower class	SUM	Upper class	Lower class	SUM
High education	a	b	a+b	XYa	Yb	Y(Xa + b)
Low education	c	d	c+d	Xc	d	Xc + d
SUM	a+c	b+d		X(Ya + c)	Yb + d	

Before: OR = (a / c) / (b / d) = ad / bc
After: OR = (XYa / Xc) / (Yb / d) = XYad / XYbc = ad / bc

Before: PD = a / (a+c) – b / (b+d)
After: PD = XYa / X(Ya+c) - Yb / (Yb+d) = Ya / (Ya + c) – Yb / (Yb + d)

Other texts refer to Mare [1981] or give no references at all. Bishop, Fienberg and Holland [1975: 14] say that the odds ratio (called the cross product ratio) is 'invariant under row and column multiplications'. If we multiply columns and/or rows with constants (different from 0), this does not change the OR, even though the marginals of the table will change. Table 2 illustrates what this means. In the cells of the left column, frequencies *a* and *c* have been multiplied by X, and in the cells of the upper row, *a* and *b* have been multiplied by Y. This produces a change in the marginals; for instance, an increase in the proportion with a higher education in the population, and in the proportion with a high status background. The formula for the OR shows why this measure and other measures derived from it are unaffected by row/column multiplication with constants. The constants appear in the nominator as well as the denominator of the fraction and are thus cancelled out. Also, the proportion difference is unaffected by multiplication by X in cells with the same value on the independent variable (i.e. columns in table 2). Changes in the distribution of the independent variable from multiplication by a constant do not alter the result for the PD. But row multiplication in Table 2, which changes the distribution on the dependent variable, affects the linear measure of association.

In Table 3 this is illustrated with numbers. The frequencies for higher education in the first row are multiplied by 3 and those for lower education in the second row by 0.5. This brings the level of education in the population up from 25% to 67%. The marginal distribution of the class variable is also altered (the percentage for 'upper' class increases from 50 to 67). For the PD the row multiplication produces a modest change in the results (from 0.4 – 0.1 = 0.3 to 0.8 – 0.4 = 0.4). The OR remains unchanged: (40/60)/(10/90) = 6 before, and (120/30)/(30/45) = 6 after the multiplication, with a Lambda of 0.45 in both cases.

Table 3. Class and education: example where the first row is multiplied by 3 and the second row by 0.5

	Before multiplication			After multiplication		
	Upper class	Lower class	SUM	Upper class	Lower class	SUM
High education	40	10	50	120	30	150
Low education	60	90	150	30	45	75
SUM	100	100	200	150	75	225

What are the implications of all this? What the statisticians say is precise and clear – no change in OR when columns and/or rows of the table are multiplied by a constant – an operation that also changes the marginal distributions. However, in the educational attainment literature, this statement has been given a much wider and unfounded interpretation. We have a logically untenable deduction, from insensitivity in relation to one specific kind of change in the marginals to the claim that the OR is insensitive to marginal changes in general. But if, for instance, we were to multiply the frequency in just one of the cells with a constant, then the marginal distributions and the OR would both be altered. For all kinds of marginal changes that are not the result of column and/or row multiplication with constants, it is difficult to see what could be the meaning of the concept of 'margin insensitivity'.

If the claim of the margin insensitivity of loglinear measures must be abandoned, the proposition that these measures should be used to describe bias in allocation mechanisms is undermined. However, the experience in the debate so far is that those who believe that there is such a thing as margin insensitivity are not easily persuaded otherwise. Therefore, a series of arguments against the use of loglinear measures as indicators of bias in allocation mechanisms are presented below.

A different trend for mechanism and outcome?

Is it possible that, as proposed by Marshall and Swift [1999], the bias in the allocation mechanism may develop differently from the inequality in the allocation outcome? Owing to the extreme complexity of the process of recruitment to higher education, none of the participants in the debate have attempted to specify in any detail the concrete nature of the mechanisms involved in allocating educational positions. In most analyses the mechanisms are treated as black boxes, and

conclusions about their unknown contents are based on the outcome as shown in the class-by-education table.

If the 'fairness' of the allocation mechanism is something that has to be inferred from the results it produces, a divergence with regard to bias in mechanism and outcome should not be possible. It would seem self-evident that inferences about stability or change in bias of the unknown allocation mechanisms must be based on information of stability or change in the inequality of the distributional outcome of the allocation process. A straightforward objection to the Marshal-Swift proposition is therefore that it does not make sense to suggest that the bias in the allocation mechanism may be stable at the same time as the inequality in the allocation outcome is decreasing.

The difference between loglinear and linear measures

The belief that loglinear measures are margin insensitive manifests itself in descriptions of a fundamental difference in substantive meaning between loglinear and linear measures of association. (No comparisons with measures of inequality are made, as they are hardly mentioned at all in the literature on educational attainment.) In his 1981 article Mare makes the following distinction between linear and loglinear measures:

> Simple differences in proportions continuing in school among background groups change over cohorts primarily in response to the average level of proportions, rather than in response to changes in the principles by which schooling is allocated. By contrast, statistical models that measure the association between school continuation and social background, net of the marginal distribution of schooling, [i.e. loglinear measures] are sensitive to changes in the principles by which schooling is allocated and not to changes in the dispersion of the schooling distribution. [Mare 1981: 83]

The claim that loglinear and linear measures capture quite different aspects of the allocation process is undermined when we take into consideration how similar, in most instances, the results given by the two kinds of measures are. There is no difference at all in their results when the distribution of the independent variable (the class composition of society) changes. Also, if the distribution of the dependent variable (education) changes, there is little or no difference in results for loglinear and linear measures as long as the proportions compared lie within the interval of 0.25 to 0.75.

We may thus have a society undergoing all kinds of changes with regard to its class composition, and also have a dramatic increase in the level of higher education, for instance from 35% to 65% for the total population, without there being any noticeable difference in results between the linear proportion difference and

the loglinear Lambda. The suggestion that there is a fundamental difference in substantive meaning between the two kinds of statistical measures is clearly not tenable within a 'normal' range of variation for the level of higher education in a society.

The important distinction is thus *not* the one between linear and loglinear measures, but rather the one between the measures of association on the one hand and the measures of inequality on the other.

Loglinear measures and bias in the allocation mechanism

As illustrated in Figure 1, it is when provision reaches high levels that the trends shown by loglinear and inequality measures diverge. By using the fictitious example of an extremely high level of provision, it becomes clear that it makes little sense to suggest that it is the loglinear measures, rather than measures of inequality, that capture bias in allocation mechanisms.[11]

Imagine a nation where 99.99% of the upper class and 99.90% of the lower class attains higher education. The participation ratio is 0.999 and the inequality coefficient accordingly 0.001, indicating that higher education positions are distributed between classes nearly as evenly as possible. The distribution on class for those with higher education is representative of the population since the two groups are practically identical. But according to loglinear measures (OR = [99.99/0.01]/[99.9/0.1] = 9999/999 = 10 and Lambda = 0.58), the mechanism for allocating higher education positions is severely biased in this case.

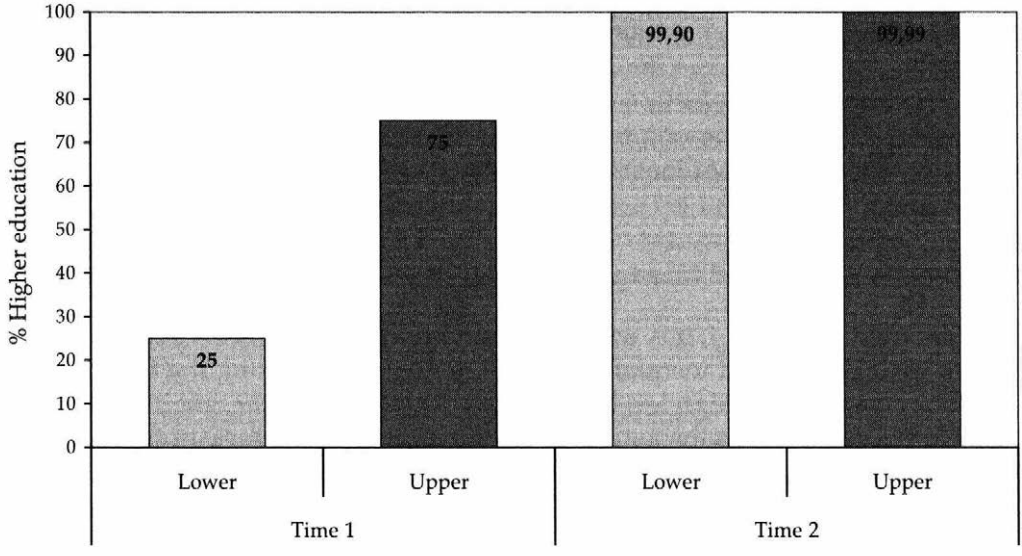
In fact, if the prior situation had been that 75% of the upper class obtained a higher education and only 25% of the lower class, this would have represented a less biased allocation mechanism according to the loglinear measures (OR = [75/25]/[25/75] = 3 / 0,333 = 9 and Lambda 0.55). In contrast, inequality measures indicate a much more unequal distribution: At Time 1, IC is 0.667 as compared to 0.001 at Time 2.

To suggest that we have an extremely biased allocation mechanism when a good is provided to nearly everyone in both classes does not seem very meaningful. The reason for the counterintuitive result is that the loglinear measures do not distinguish between getting and not getting a good, the values of the education variable are treated symmetrically. What actually is very unequally distributed at Time 2 is the case of *not* having obtained a higher education (0.10 as compared to 0.01). The rationale behind measures of inequality, however, is that the values of the variable in question are seen as asymmetric; they may be ranked according to attractiveness.[12]

[11] A problem that we will not go into here is the question of the devaluation of higher education; that is, the extent to which the value of obtaining a higher education is dependent on the number of people obtaining one.

[12] *Cf.* note 9.

Figure 2. Fictitious examples of class–education relationships



The contrast in Figure 1 between the monotonously decreasing inequality shown by the IC and the pattern of the first decreasing and then increasing association according to Lambda, as the provision of higher education increases in such a way that a constant gap between the classes is preserved, demonstrates how the two kinds of measures react differently to changes in the level of provision. Figure 2 provides an example where it goes against common sense to claim that loglinear measures rather than inequality measures capture the degree of bias in the allocation mechanism.

Models of allocation mechanisms

Another way of comparing the ability of loglinear and inequality measures to capture mechanism bias is to construct a theoretical model of the recruitment process that gives independent indicators of bias in the allocation process. Even if such a model fails to capture the complexity of the real processes, it should at least come closer to reality than the model of 'row and column multiplication with a non-zero constant' which is the basis of the margin insensitivity thesis.

Earlier in the debate sampling models were suggested as being a simple representation of the allocation process, with quota sampling and stratified random probability sampling proposed as alternatives [Hellevik 1997: 390, 2000: 83]. Table 4 shows an example of an increase of 40 percentage points in the level of higher education in both classes. The PD and the OR/Lambda show a stable as-

sociation between class and education, and the PR/IC shows decreasing inequality over time. To simplify calculations, the two classes are assumed to be of equal size.

The question now is what the two sampling models, each representing a possible, if not very realistic, process of recruitment to higher education that could have produced the results shown in Table 4, will tell us about bias in the allocation mechanism. Is the bias stable, as Marshall and Swift [1999] would infer from the stable loglinear measures? Or is there less mechanism bias at Time 2, as the inequality measures suggest?

If we imagine that recruitment to higher education is done by means of quota sampling, the quotas are clearly biased at Time 1, since the upper class gets more and the lower class less than what corresponds to their shares of the population. The quotas at Time 2 are less biased since, to produce the results in the table, they must have been fixed so as to make the social composition of the sample more similar to the 50-50 distribution on classes in the population. The sample distribution has changed from 67-33 at Time 1 to 57-43 at Time 2. If we regard the additional positions of higher education allocated at Time 2 as a new quota sample, added to the original one with a 67-33 distribution, the composition of the additional sample is proportionate to the population distribution (50-50). The allocation of the 'new' positions amongst classes is unbiased since it reflects the class composition of society.

Either way, the conclusion from the quota sampling model is clear: There is a change in the selection mechanism (the quota distribution) that makes it less biased at Time 2 than it was at Time 1. In other words, the trend of mechanism bias is the same as the trend of outcome inequality shown by inequality measures. Both show decreased inequality/bias, in contrast to the stable results shown by the loglinear and linear measures of association.

If we instead use stratified random sampling as a selection model, bias in the mechanism may be defined as disproportionality, which is indicated by the difference between the sampling fractions within the two classes. However, this difference may be described in two ways: as the absolute difference, or as the ratio between the fractions. The first is the same as the proportion difference (PD), the second the same as the proportion ratio (PR). Thus we are back where we started, forced to choose between measures of association and inequality to describe selection bias.

However, there is a criterion for determining the degree of bias in the sampling procedure that may solve the question of change or stability in the selection mechanism. With a disproportionate sample, weighting is used to restore representativity. The weights are calculated as the ratio between a group's share of the population and its share of the sample. The closer the weights are to the value 1, the less bias there is in the sampling procedure that has to be corrected through weighting. Table 4 shows that the weights needed at Time 1 to correct for sampling bias are further away from unity than the weights at Time 2. This

Table 4. Two sampling models for recruitment to higher education (classes of equal size)

Class:	Time 1 Lower	Time 1 Upper	Time 2 Lower	Time 2 Upper	Conclusion with regard to change from Time 1 to 2
% higher education	20	40	60	80	
Proportion difference H-L	0.20		0.20		Stable association
Odds	0.25	0.67	1.50	4.00	
Odds ratio H / L	2.67		2.67		Stable association
Lambda	0.25		0.25		Stable association
Participation ratio: L / H	0.50		0.75		Increased equality
Inequality coefficient (1 – PR)	0.50		0.25		Reduced inequality
% quota of sample	33	67	43	57	Reduced selection bias
% additional quota at time 2	–	–	50	50	Reduced selection bias
Sampling fraction	0.2	0.4	0.6	0.8	
Difference in sampling fractions	0.2		0.2		
Ratio of sampling fractions	0.5		0.75		
Weights needed to make sample representative of population	1.52	0.75	1.16	0.88	Reduced selection bias

is no surprise, since the ratio of the sampling weights in fact corresponds to the participation ratio.

The two models are extremely simple, and of course are nowhere near a realistic representation of the actual recruitment processes. Nevertheless, they are realistic in the sense that they could have produced the results found in empirical studies of class differences in educational attainment. What both models show is that when the outcome of the allocation process becomes less unequal, the selection mechanism is less biased, according to the composition of the quotas and the sampling weights. It is thus measures of inequality, and not loglinear measures, that capture the trend for bias in the allocation mechanisms.

In an article from 1996, John Logan developed another allocation model, a two-sided logit model (TSL), derived from a random matching model of oppor-

tunity, for the matching of individuals to jobs. He defined an explicit set of rules of access and was thereby able to test, through simulations, the effect of changes in demand (job offers) on loglinear measures. His concludes:

> *Margin insensitivity* – the ability to multiply rows and columns without affecting odds ratios – does not guarantee *demand insensitivity,* the ability of parameters to measure the rules of access without being affected by shifts in demand. Loglinear models possess the former but not the latter property, while the situation is reversed for TSL models. [Logan 1996: 176]

Those who continue to insist that loglinear measures reflect bias in the selection procedures face the challenge of arguing against the relevance of the above models, and of establishing counter-examples in the form of models in which the distribution of higher education may become more equal at the same time as the bias in the allocation mechanism remains unchanged. This challenge was made early on in the debate [Hellevik 2000], but so far no one has taken it up.

The relationship between provision and outcome inequality

Will increased provision necessarily reduce inequality, and is the expansion of higher education a sufficient explanation for the observed reduction of inequality in the distribution of higher education positions between classes? With regard to social mobility, an increase in the number of high status positions means that there will necessarily be some upward mobility in order for these positions to be filled. For recruitment to higher education, there will similarly be a restriction on the outcome if the increase in provision of higher education positions exceeds what can possibly be absorbed by the upper class. In Table 4, where provision of higher education increases by 40 points from 30% to 70% for the whole population, the percentage with a higher education in the lower class must necessarily increase from 20% to at least 40%, since the upper class can at most absorb three-quarters of the increased provision between Time 1 and Time 2 before the 100% ceiling is reached.

However, within the limits set by this restriction, any outcome is possible. The 'new' positions at Time 2 may in theory all have gone to the lower class, making it the privileged class with regard to higher education (100% attainment compared to 40% for the upper class). A more realistic outcome may be the same relative increase for both classes, which would have meant percentages for higher education of 47% in the lower and 93% in the upper class at Time 2. In this case, association according to the percentage difference and Lambda would have increased (from 0.20 and 0.25 to 0.46 and 0.68, respectively), while the inequality would have been the same as at time 1 according to the PR/IC. In this case the two sampling models would have shown the bias in the allocation mechanism to

be stable (we would have had the same quota distributions or sampling weights at Time 1 and Time 2).

An increase in provision does not in itself guarantee that the distribution of higher education will become less unequal (except for possible ceiling effects). If the same sampling models had been used as mechanisms for allocating education positions at Time 2 as at Time 1, the inequality of the outcome would have remained the same even with a dramatically increased provision. The reduced inequality in Britain shown in Table 1 is thus the result of a change in the bias of the allocation mechanisms. Without this change, the inequality of the outcome would not have been reduced. The increase in the provision of higher education may, however, have facilitated such a change in the mechanism bias. It may for instance have been easier for the upper class to accept a development which meant a deterioration of its privileged position in the education system, since members of this class also experienced increased access to higher education.

Actual developments in many countries in the second half of the 20th century, that is, a parallel increase in the percentage of people attaining higher education in different classes, may have been experienced as 'fair' in the sense that the additional positions were distributed proportionately according to the population share of the classes. Without an increase in provision, a reduction of bias in the allocation mechanism would have been less likely to occur, since this would then have required a loss in the number of higher education positions for the upper class. Increasing provision makes it possible for egalitarian reforms to achieve their goals with less risk of producing social tensions and conflicts. But increased provision will not necessarily in itself lead to a more equal distribution of higher education positions.

In the literature in which the development of class inequality in educational attainment is described as stable, we find quite the opposite interpretation of the consequences of growth in educational opportunities. The expansion of higher education is seen as the reason that the lower class and their political representatives have accepted stable inequality (which actually, as we have argued, is stable association and not inequality):

> As long as the educational attainment of lower social strata is rapidly increasing, political attention can neglect any parallel increases among the privileged classes. Thus, educational expansion can alleviate political pressure to reduce inequalities.
>
> ... Thus the modernization theorists' hypothesis that educational expansion results in greater equality of educational opportunity must be turned on its head: expansion actually facilitates to a large extent the persistence of inequalities in educational opportunity. [Blossfeld and Shavit 1993: 22]

If in fact, as I have argued, class inequalities of educational opportunity have been reduced over the past decades, a development probably facilitated by educational expansion, the hypothesis of the modernisation theorists is not rejected but rather supported by the empirical results.

Moderate and radical reform strategies

As a final effort to make the point that increasing provision combined with a stable association means reduced inequality, rather than stable inequality, as students of educational attainment seem to think, an example from a less complex allocation process will be used, namely that of wage negotiations. The goal of an egalitarian income policy would be to reduce the inequality produced by unequal wage allocation in the past. Without an expanding economy, a policy to transfer income from high- to low-income groups would be necessary to reduce inequality, a policy bound to produce conflicts. With more income to distribute than in previous years, one might choose a radical egalitarian strategy of compensatory wage increases that reverses the past pattern of bias. However, giving high-income groups a smaller nominal wage raise than low-income groups would probably meet with fierce opposition from the privileged strata. Changing to a non-biased distribution of wage increases, that is, giving the same absolute raise to all, would be an example of a moderate egalitarian reform more likely to be accepted as fair by all groups.

That even the moderate strategy of giving the same wage increase to all groups is egalitarian in its consequences is reflected in the strategies of the parties in wage negotiations. Equal absolute raises are demanded by unions campaigning for an egalitarian outcome, while unions representing high-income workers will fight to preserve their present privileges by insisting on the principle of equal relative increases. The strategy of equal absolute raises means preserving the absolute wage differences (the association between occupation and income as measured by a regression coefficient will be stable), but by raising the wage level for all occupations the inequality-generating effect of the constant income gap is gradually reduced, as shown by the wage ratio or the Gini coefficient for the income distribution.

Similar points of view are found in the literature on income redistribution. It is well known that a uniform income transfer will have a strongly equalising effect on the final distribution of income even though absolute income differentials are left unaffected, and even though the statistical association between the primary and the final distribution of income remains constant (perfect rank-correlation) [Lambert 1993]. The same holds for benefits in kind that are sometimes made uniformly available to the general population [see Aaberg 1984].

Conclusion

There are several reasons why this discussion of trends in educational attainment is more than just nitpicking over methodological subtleties. No one can deny the important theoretical and practical implications of the topic. Basic structural aspects of modern societies and the ability of their political institutions to alter them are disputed. This makes it all the more remarkable that views continue to

differ so sharply over what actually occurred during the second half of the 20th century with regard to class inequality in recruitment to higher education and the effects of egalitarian educational reforms.

Stein Ringen and I have argued that students of educational attainment have misinterpreted their own empirical data, because they have not distinguished between measures of association and measures of inequality. The statistical *association* between class and education may have been relatively stable, but this stability, in combination with a rising level of education in the population, means that the *inequality* in the distribution of higher education has been markedly reduced over time. Those from the new cohorts who attain higher education are more representative of their societies than the highly educated in prior generations were of theirs. This is a result of reduced bias in the allocation mechanisms, most likely facilitated by the increasing provision of higher education. Decreasing inequality means that the conclusion in the literature that egalitarian educational reforms are ineffective is empirically unfounded.

The discussion is also a reminder of how important it is to choose statistical measures that correspond to the purpose of the analysis, measures that actually capture what the researcher wants to describe. However, up to now it has been surprisingly difficult to find acceptance for the suggestion that measures of inequality, rather than loglinear measures of association, should be used to analyse inequality.

One problem may be that loglinear measures are relatively complicated, and their characteristics perhaps not always fully understood, even by those who use them. This has lead to the widespread but unfounded belief that loglinear measures are margin insensitive in a general sense, reflecting association net of changes in class composition and educational provision, so as to capture bias in the allocation mechanism.

Considering how central the concept of inequality is to the study of class differences in educational attainment, it is puzzling that the statistics called 'measures of inequality' have been more or less overlooked in the literature. One reason for not considering alternatives to the preferred approach, of course, is the firm if unjustified belief in the 'margin insensitivity' of loglinear measures. It is also possible that measures of inequality have not been considered simply because they are less well known and less often used than measures of association in sociology. For instance, they are rarely mentioned in statistical textbooks for sociologists, in contrast to textbooks for political scientists.[13]

There were indications in the debate at the RC28 meeting in Brno in 2007 that a reconsideration of positions may be under way. John Logan presented his

[13] Some early examples of statistics textbooks for political science that discuss measures of inequality such as the Gini Coefficient/Index are Alker [1965], Benson [1969], Hellevik [1971], and Leege and Francis [1974]. In contrast the Gini is not mentioned in Blalock's classic sociology text [1960], nor in Galtung [1967], or Iversen [1979].

critique of the margin insensitivity claim in its extended version and said that he hoped never to hear that claim repeated in the future. Yossi Shavit, in his presentation for the plenary session, wrote that it has been a mistake to regard educational expansion as a 'nuisance' to be adjusted for, and suggested that it be brought back into the recruitment models instead of being ignored.[14] One way of doing this is to make use of inequality measures, as suggested by Stein Ringen and myself.

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References

Aaberg, R. 1984. 'Market-independent Income Distribution: Efficiency and Legitimacy.' Pp. 209–230 in *Order and Conflict in Contemporary Capitalism*, edited by J. Goldthorpe. Oxford: Oxford University Press.

Alker, H. R., Jr. 1965. *Mathematics and Politics.* New York: The Macmillan Co.

Benson, O. 1969. *Political Science Laboratory.* Columbus, Ohio: Charles E. Merrill Publishing Co.

Bishop, Y. M. M., S. E. Fienberg and P. W. Holland. 1975. *Discrete Multivariate Analysis.* Cambridge: MIT Press.

Blalock, H. M. 1960. *Social Statistics.* New York: McGraw-Hill & Co.

Blossfeld, H.-P. and Y. Shavit. 1993. 'Persisting Barriers. Changes in Educational Opportunities in Thirteen Countries.' Pp. 1–23 in *Persistent Inequality. Changing Educational Attainment in Thirteen Countries*, edited by Y. Shavit and H.-P. Blossfeld. Boulder: Westview Press.

Breen, R. and J. O. Jonsson. 2000. 'Analyzing Educational Careers: A Multinomial Transition Model.' *American Sociological Review* 65: 754–772.

[14] Quotes from the PowerPoint presentation by Yossi Shavit, Meir Yaish and Eyal Bar Haim for the plenary session at the Brno RC28 meeting, posted at the conference website: 'Despite the importance of educational expansion in the public and theoretical debate concerning IEO, it is usually ignored by empirical research. Rather, it is treated as a nuisance to be adjusted for' (From slide 5). 'Effective egalitarian educational policy increases participation (expansion). However, much of our collective work ignores expansion and thus, misses an important beneficial outcome. Let's bring expansion back into our models' (From slide 26 – the final one).

Breen, R. and J. O. Jonsson. 2005. 'Inequality of Opportunity in Comparative Perspective: Recent Research on Educational Attainment and Social Mobility.' *Annual Review of Sociology* 31: 223–243.
Erikson, R. and J. H. Goldthorpe. 1992. *The Constant Flux. A Study of Class Mobility in Industrial Societies.* Oxford: Clarendon Press.
Erikson, R. and J. O. Jonsson. (eds.) 1996. *Can Education be Equalized?* Boulder, CO: Westview.
Galtung, J. 1967. *Theory and Methods of Social Research.* Oslo: Universitetsforlaget.
Glennerster, H. and W. Low. 1990. 'Education and the Welfare State: Does It Add Up?' Pp. 28–87 in *The State of Welfare. The Welfare State in Britain since 1974*, edited by J. Hills. Oxford: Clarendon Press.
Grusky, D. B. and M. Tienda. 1993. 'Foreword.' Pp. vii–viii in *Persistent Inequality. Changing Educational Attainment in Thirteen Countries*, edited by Y. Shavit and H.-P. Blossfeld. Boulder: Westview Press.
Halsey, A. H. 1977. 'Towards Meritocracy? The Case of Britain.' Pp. 173–186 in *Power and Ideology in Education*, edited by J. Karabel and A. H. Halsey. Oxford: Oxford University Press.
Heath, A. F. and P. Clifford. 1990. 'Class Inequalities in Education in the Twentieth Century.' *Journal of the Royal Statistical Society*, Series A 153: 1–16.
Hellevik, O. 1971. *Forskningsmetode i sosiologi og statsvitenskap.* (Research Methods in Sociology and Political Science) Oslo: Universitetsforlaget.
Hellevik, O. 1983. 'Politisk deltakelse I Norge – begrenset og skjev?' (Political Participation in Norway – Limited and Skewed?). *Tidsskrift for samfunnsforskning* 24: 3–30.
Hellevik, O. 1997. 'Class Inequality and Egalitarian Reform.' *Acta Sociologica* 40: 377–397.
Hellevik, O. 2000. 'A Less Biased Allocation Mechanism.' *Acta Sociologica* 43: 81–83.
Hellevik, O. 2002. 'Inequality versus Association in Educational Attainment Research: Comment on Kvininen, Ahola and Hedman.' *Acta Sociologica* 45: 151–158.
Hosmer, D. W. and S. Lemeshow. 1989. *Applied Logistic Regression.* New York: John Wiley & Sons.
Iversen, G. 1979. *Statistics for Sociology.* Dubuque Iowa: C. Brown.
Kivinen, O., S. Ahola and J. Hedman. 2001. 'Expanding Education and Improving Odds. Participation in Higher Education in Finland in the 1980s and 1990s.' *Acta Sociologica* 44: 171–181.
Kivinen, O., S. Ahola and J. Hedman. 2002. 'Changes to Differences in Expanding Higher Education: Reply to Hellevik.' *Acta Sociologica* 45: 159–162.
Lafferty, William M. 1981. *Participation and Democracy in Norway. The Distant Democracy Revisted.* Oslo: Universitetsforlaget.
Lambert, P. J. 1993. *The Distribution and Redistribution of Income. A Mathematical Analysis.* Manchester: Manchester University Press.
Lampard, R. 2000. 'Measuring Inequality in a Cross-tabulation with Ordered Categories: From the Gini Coefficient to the Tog Coefficient.' *International Journal of Social Research Methodology* 3: 1–14.
Leege, D. C. and W. L. Francis. 1974. *Political Research. Design, Measurement and Analysis.* New York: Basic Books.
Logan, J. A. 1996. 'Rules of Access and Shifts in Demand: A Comparison of Log-linear and Two-sided Logit Models.' *Social Science Research* 25: 174–199.
Mare, R. D. 1981. 'Change and Stability in Educational Stratification.' *American Sociological Review* 46: 72–87.
Marks, G.N. 2004. 'The Measurement of Socio-economic Inequalities in Education: A Further Comment.' *Acta Sociologica* 47: 91–93.

Marshall, G. and A. Swift. 1999. 'On the Meaning and Measurement of Inequality.' *Acta Sociologica* 42: 241–250.
Marshall, G. and A. Swift. 2000. 'Reply to Ringen and Hellevik.' *Acta Sociologica* 43: 85–86.
Martinussen, W. 1977. *The Distant Democracy: Social Inequality, Political Resources and Political Influence in Norway.* London: John Wiley and Sons.
Murphy, J. 1981. 'Class Inequality in Education: Two Justifications, One Evaluation But No Hard Evidence.' *British Journal of Sociology* 32: 82–101.
Murphy, J. 1990. 'A Most Respectable Prejudice: Inequality in Educational Research and Policy.' *British Journal of Sociology* 41: 29–54.
Ringen, S. 1997. *Citizens, Families and Reform.* Oxford: Clarendon Press.
Ringen, S. 2000. 'Inequality and Its Measurement.' *Acta Sociologica* 43: 84.
Ringen, S. 2005. *Citizens, Families and Reform.* 2nd ed. New Brunswick: Transaction Publishers.
Ringen, S. 2006. 'The Truth about Class Inequality.' *Sociologický časopis/Czech Sociological Review* 42: 475–491.
Saunders, P. 1996. *Unequal but Fair? A Study of Class Barriers in Britain.* London: IEA.

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Determination of College Expectations in OECD Countries: The Role of Individual and Structural Factors*

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Abstract: Renowned international experts in higher education financing have argued that, owing to large government deficits, tertiary education will not be able to open up and meet growing demand unless cost-sharing principles and efficient student financial aid programmes are introduced. Opponents of cost-sharing in higher education object that introducing tuition fees will raise inequality in access to higher education. Drawing on OECD data, and focusing on college expectations, the authors argue that the effects of ability, gender, and socio-economic background on college expectations are primarily shaped by the characteristics of secondary education systems, such as the degree of stratification and vocational specificity of secondary schools, while the principal characteristics of the tertiary education system, such as enrolment rates and the model of financing, play a much less important role. The results clearly show that, after controlling for the effects of secondary school system characteristics, cost-sharing, as such or by degree, does not affect the formation of college expectations by ability, gender, and socio-economic background as much as the selectivity of the secondary school system does.

Keywords: higher education, aspirations, ability, inequality, selectivity
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Introduction

Adolescents' aspirations and expectations influence not only what they choose to study in school but also how they prepare for life as adults and ultimately the kinds of careers they embark on. Since aspirations serve as an important link between an adolescent's social origin and the educational and occupational careers

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they may pursue, one of the liveliest areas of research in social stratification has naturally been the study of aspirations. Most such studies have produced significant evidence about the role of social origin, ability, and school context in shaping aspirations. Growing attention has also been given to the role of the institutional context. However, much of the research on the impact of education systems on aspirations and expectations has been based on a small sample of countries, which limits the generalisability of their findings and prevents sociologists from being able to better weigh the importance of different factors in shaping educational aspirations around the world.

Our study contributes to this body of knowledge by analysing the role of specific features of education systems in shaping college expectations using data from the PISA 2003 project.[1] The analysis involved a number of steps. First, by drawing on concepts proposed in previous research on the relationships between aspirations and the structural characteristics of education systems, we created composite variables (dimensions) representing the degree of stratification and vocational specificity of the secondary education system on the one hand, and the permeability, openness, and financing of tertiary education on the other. Next, we used PISA 2003 data to conduct individual-level logistic regressions of college expectations on parental socio-economic status (SES), child's measured ability, and gender to assess the degree to which they determine college expectations. The results of the logistic regressions are then entered into the analysis of the relationships between the degree of stratification, openness, and selectivity in the education system on the one hand, and the degree to which they determine college expectations on the other.

Prior research on the role of social-psychological and structural factors in the formation of educational aspirations and expectations

From the very outset social stratification research has produced overwhelming evidence that the educational aspirations of adolescents are one of the strongest predictors of educational and occupational careers [Hyman 1953; Reissman 1953; Kahl 1953; Herriott 1963]. Since the early 1950s, the development of pupils' aspirations has been one of the most frequent topics in research on social stratification and the inter-generational transmission of social status. Thus, by the early 1970s, Williams [1972] was able to identify more than four hundred studies relating to educational aspirations alone. By 2004 as many as 1100 articles on this topic had been published in professional journals alone.[2]

[1] PISA (Programme for International Student Assessment) is the largest cross-national comparison of adolescents to date. A total of forty-one countries participated in the survey in 2003, of which thirty were OECD member states.

[2] According to the EBSCOhost research database.

Many of the pioneering studies on educational aspirations that significantly influenced further research on social stratification, inequality, and mobility emerged from the work of William H. Sewell and his colleagues, who laid the foundations of the so-called social-psychological school in social stratification research (Archibald O. Haller, Vimal P. Shah, Alejandro Portes, Otis D. Duncan, Robert M. Hauser, to name some of its most important figures). To explain the variance in the educational aspirations of adolescents, early studies by these scholars [Sewell, Haller and Straus 1957; Sewell 1961, 1963; Sewell and Hauser 1972; Sewell and Shah 1967; Sewell and Shah 1968a, 1968b] pointed to such factors as parental SES, measured ability, academic performance, parents' expectations and encouragement, and peers' aspirations, to list just a few.

The late 1960s saw the introduction of a new impetus into research on aspirations, particularly owing to the seminal contribution of Peter Blau and Otis D. Duncan [1967; Duncan 1968], whose model of the social stratification process offered a new theoretical and methodological context for research. Partly in response to the simplicity of the original Blau–Duncan model, aspirations – previously studied primarily as a dependent variable – were placed at the very centre of the so-called Wisconsin social-psychological model [Sewell, Haller and Portes 1969; Sewell, Haller and Ohlendorf 1970; Hauser 1972; Sewell and Hauser 1972, 1975; Hauser, Tsai and Sewell 1983]. Based on the extensive Wisconsin Longitudinal Study, Sewell, Hauser and their colleagues demonstrated that educational aspirations – shaped primarily by measured ability, academic performance, parental SES, teachers and peers – play the key role in explaining later educational and occupational attainment. In this sense, educational aspirations have become 'the strategic centre of the model' [Haller and Portes 1973: 68].

Over time, other approaches to the study of educational aspirations eventually challenged some of the core assumptions in the social-psychological model. Alan C. Kerckhoff, in his first critical analysis of the 'socialisation model' [Kerckhoff 1976], emphasised that even though scholars who subscribed to the socialisation perspective achieved impressive results in their explanations of the processes of educational and occupational attainment, they did not pay adequate attention to the structural constraints that individuals take into account (more or less consciously) when making important decisions about their future educational and occupational careers. As a result, Kerckhoff argued, the social-psychological model left a good deal of the variance in aspirations unexplained [Kerckhoff 1976].

Therefore, without questioning the true achievements of the research carried out under the socialisation perspective, the advocates of the 'allocation' perspective [Kerckhoff 1976; Kerckhoff and Campbell 1977a, 1977b; Wilson and Portes 1975; Simmons and Rosenberg 1971; Alexander and Eckland 1975; Karabel and Astin 1975; Jencks 1972; Han 1968, 1969] suggested that the research on aspirations and their role in the attainment process underestimated how contextual and institutional conditions influence the way pupils' unconstrained 'wishes' transform into 'realistic' plans. The allocation model was not intended to replace

the socialisation model, but was rather meant to draw into consideration other factors that could help explain the attainment process and, in particular, the formation of educational aspirations. 'The socialization model interprets the strong association between ambition and attainment as indicating that the goals direct and motivate the child's efforts during the formative years and thus determine the level of attainment he reaches later. (..) this interpretation implies an open system within which the major determinants of attainment are motivation and ability. (...) It seems reasonable to argue that expectations of the future are affected by observed structural constraints, and thus they reflect more than pure motivation.' [Kerckhoff 1976: 371]

The real impact of education systems on the formation of educational aspirations can only be properly assessed in a cross-national comparative analysis. One of the first comparative analyses of the formation of aspirations was Kerckhoff's study [1977] of thirteen-year-old boys in the United States and England, which built on the distinction between 'contest' and 'sponsored' mobility proposed earlier by Turner [1960]. Following Turner's argumentation, Kerckhoff pointed out that the English education system forced adolescents to make irreversible decisions about their educational careers.[3] Both authors noted that the American system was much more open to the 'contest' type of mobility, 'providing more opportunity for adolescents to change course throughout secondary school and encourages the belief that such a change is possible' [Kerckhoff 1977: 564]. Thus, as Turner concludes, 'the earlier that selection of elite recruits is made, the sooner others can be taught to accept their inferiority and to make 'realistic' rather than fantasy plans' [Turner 1960: 859].

Kerckhoff's comparative analysis confirmed that social origin and ability played a greater role in explaining educational aspirations among English boys than among their American counterparts. In interpreting these results, in line with Turner's argument, Kerckhoff attributed the more structurally constrained aspirations in England, compared to the US, to the greater 'realism' of English pupils and the English system's emphasis on ability for determining which type of secondary school a pupil would attend. While the English system leads pupils to develop realistic educational and occupational plans earlier in life, the American system does not provide the same structural constraints, and thus pupils maintain lofty aspirations until late in the educational process, that is, as high school graduation nears and realistic assessments of career options need to be made.

Educational aspirations are therefore shaped not just by factors at the individual or social-psychological level (e.g. parental SES, measured ability) and at the contextual level (e.g. the quality and type of schools attended) but also at the structural level of the education system. Research on the role of education

[3] At the age of eleven or twelve, English boys had to choose between the 'elite' grammar school, which had a more demanding and academically oriented curriculum preparing students for post-secondary education, and the more popular, and academically less demanding, 'secondary modern school'.

systems on educational aspirations has been largely based on the typology of systems introduced by Müller and Shavit [1998] and further elaborated by Kerckhoff [2001]. The typology is based on three dimensions according to which education systems can be classified: the degree of stratification in the education system, the system's orientation towards vocational training (vocational specificity), and its standardisation.

'Stratification', most often used to classify secondary schools, 'refers to the degree to which systems have clearly differentiated kinds of school whose curricula are defined as "higher" and "lower". (...) In stratified systems, the program offerings in the types of secondary schools are associated with different degrees of access to opportunities for additional, more advanced schooling. So, the term *stratification* refers to both the kind of programs offered and their links to future opportunities' [Kerckhoff 2001: 4]. 'Vocational specificity', another relevant dimension used often in analyses of education systems, is the degree to which curricula are designed to prepare students for particular vocations. In terms of statistical indicators, it can be represented by the proportion of students leaving the education system with specific skills [e.g. Buchmann and Dalton 2002]. A high degree of vocational specificity very often indicates also a high degree of system stratification, because schools providing training for specific occupations usually co-exist with schools preparing for further, more academic types of education at a higher level. In other words, high vocational specificity goes hand in hand with high stratification, usually within the so-called dual system of secondary education, such as that in Germany. 'Standardisation' refers to the degree to which governments create the conditions (e.g. teachers' education, education financing, etc.) and the control mechanisms (nationwide testing, school-leaving examinations, etc.) to achieve certain standards of quality in the education provided by different schools.

The above-mentioned classification of education systems, together with the highly standardised statistical data on education systems published every year by the OECD in its *Education at a Glance*, and data from large-scale comparative surveys of adolescents assessing various aspects of their ability and skills, socio-economic background, values, and aspirations (such as TIMSS, PISA, and PIRLS), all provide exceptionally strong empirical evidence that enables the use of multilevel analytical strategies to explain educational aspirations in different institutional settings and societal contexts. In other words, these very rich sources of data can be used to explain the formation of educational aspirations and educational attainment by factors on different analytical levels: individual (parental SES, measured ability), contextual (school level differentiation), and structural (institutional characteristics of education systems).

Research on the interplay between the individual, contextual and structural levels in the formation of educational aspirations has already brought valuable results. Buchmann and Dalton [2002] used data from one of the large-scale student assessment projects [*TIMSS* 1995] to identify differences between selected countries in the effect of parents' and peers' attitudes towards education on the

educational aspirations of thirteen-year-olds. First, the study has confirmed that, after controlling for the effect of ability (math achievement), the effect of parents' education on the educational aspirations of adolescents is significantly higher in countries with highly stratified education systems than in countries with relatively undifferentiated systems of secondary education. Conversely, the attitudes of parents and peers towards education more significantly affect the educational aspirations of adolescents in countries with less stratified systems. The authors, though they acknowledge that their evidence is not strong, come to the conclusion that in more differentiated systems aspirations are largely determined by the type of school students attend, so there is little room for interpersonal effects [Buchmann and Dalton 2002: 99].

Special attention has to be paid to differences in educational aspirations and expectations between schools, whether resulting from the formal stratification of schools (i.e. due to the existence of different types of schools at a secondary level), from tracking within schools of the same type, or just from differences in the quality of schools not associated with any formal school classification. While differences in student achievement according to type of school were recently studied in a cross-national comparative perspective, thanks to the PISA assessments [see, e.g., OECD 2005c], cross-national differences in between-school variance still await a thorough analysis. Like school performance, differences in educational aspirations between schools are also often attributed to differences in the socio-economic background of students, especially in highly stratified systems.

But even in quite comprehensive systems there are mechanisms through which schools develop specific educational settings, and these affect the further aspirations of students. In many countries, for example, the choice of school may effectively homogenise the socio-economic composition of the student body; the socio-economic composition may also be determined by the school's geographic location, with wealthy neighbourhoods being served by schools that tend to have higher levels of student performance, but also higher educational aspirations. Therefore, even in more universal school systems, parents with higher socio-economic status may find the means to send their child to better schools. Technically, multi-level analysis can reveal this effect, by separating the so-called intra-class correlation, which indicates the degree to which aspirations vary between schools. We may assume that in highly stratified or tracked education systems the intra-class correlation for college aspirations will be much larger than in less stratified systems, but even there, owing to processes mentioned above, it can be quite large.

The aim of this paper is to go a step further in the empirical elaboration of the relationships between educational expectations and the institutional characteristics of education systems. More specifically, in the first step, statistical data portraying systems of secondary and tertiary education in OECD countries are used to assess the relevant structural characteristics of education systems (degree of stratification, vocational specificity, selectivity, openness, etc.). In the second

step, survey data from the OECD international student assessment [OECD 2005a, 2005b] are analysed to assess the degree to which the college expectations of fifteen-year-olds are determined by measured ability, gender, and socio-economic background. Finally, in the third step, the results from the previous two steps are entered into a set of regression analyses carried out again at the country level, designed to test hypotheses about the role of relevant education system characteristics – such as secondary school system openness, enrolment rates in tertiary education, the principal characteristics of the system's financing – in how college expectations are determined by ability and socio-economic background.

Hypotheses, data, analytical strategy, and methodology

Assumptions and hypotheses

The existing evidence from comparative research on education systems [Müller and Shavit 1998; Kerckhoff 2001; Buchmann and Dalton 2002; OECD 2006] allows us to build on two assumptions regarding the relationships between the structural characteristics of secondary and tertiary education:

A1: The degree of stratification and vocational specificity are two closely related characteristics of secondary education systems;

A2: The openness and permeability of secondary education is strongly associated with the openness of tertiary education.

These two assumptions will be verified on recent OECD data, and the results of the verification process (principal component analysis) will be used to define composite variables for use in further analysis of the determination of college expectations.

Drawing on previous comparative research on the institutional embeddedness of college expectations, four main hypotheses can be formulated for analysis:

H1: The more open the secondary system, the less college expectations are determined by social origin, ability and gender. The same applies to the overall openness of the education system.

H2: The effects of ability and socio-economic background on college expectations are shaped more by the openness of the secondary system than by the openness of the tertiary system.

H2a: Between-school variance is the most important characteristic of the secondary education system affecting the degree to which college expectations are determined by ability and socio-economic background. Such

variance can stem from either formal system stratification (the existence of different types of schools, tracking, etc.) or other, less apparent, processes (school choice, within school tracking, etc.). By controlling for between-school variance (represented by the intra-class correlation), the effects of other characteristics of the secondary school system can largely be eliminated.

H2b: After controlling for the effect of the openness of the secondary education system the effects of tertiary education enrolment, of the share of tuition fees in financing tertiary education, and of financial aid to students on how much college expectations are determined by ability and by socio-economic background should not be significant.

Data

Statistical data used to describe education systems and to define relevant dimensions of their stratification come from the OECD yearbook *Education at a Glance* [OECD 2003, 2004, 2005d, 2006].[4] This rich source of data provides information about the basic characteristics of education systems, access to education, participation and progress, financial and human resources invested in education, the learning environment, and the organisation of schools, etc. Most of the indicators published in the 2005 edition of the yearbook describe the situation in 2003, when the PISA 2003 survey data was collected in participating countries.

Two sets of statistical indicators were used to describe the education systems in individual countries in terms of their stratification, openness, and permeability. The following four indicators were used for secondary education:[5]

a) GENSEC: Upper secondary education enrolment in general education programmes (2003)
b) NUMPRG: Number of school types or distinct educational programmes available to fifteen-year-olds (2003)
c) VOCAT: Proportion of fifteen-year-olds enrolled in programmes that give access to vocational studies at the next level of education or direct access to the labour market (2003)
d) EXPSEC: Expenditure on educational institutions of primary, lower secondary, and primary education as a percentage of GDP from public and private sources (2002)

[4] Some indicators that were not available in the most recent edition of *Education at a Glance* (2006) were obtained from earlier editions (2003, 2004, and 2005).

[5] The acronyms for the statistical indicators (i.e. the names of the variables used in the analyses) and the values of indicators in individual countries are displayed in Table A1 in the Appendix.

Four variables were also used to indicate the openness of the tertiary education system:

a) ENROL: Net entry rates into tertiary education (2003)
b) PRVRSC: Relative proportion of private sources of funding on institutions of tertiary education (percentage of total expenditure – 2002)
c) FINAID: Financial aid to students: public subsidies for households and other private entities as a percentage of total public expenditure on tertiary education (percentage of total expenditure on tertiary education – 2002)
d) EXPTER: Expenditure on tertiary educational institutions as a percentage of GDP from public and private sources.

The international data file from the PISA 2003 was used to test our hypotheses about the determination of college expectations by ability, parental socio-economic status, gender, and type of school. Although the PISA 2003 focused mainly on mathematical literacy, it also tested three other dimensions, namely reading literacy (covered mainly in the PISA 2000), science literacy (covered mainly by the PISA 2006), and problem solving. The target population of the PISA surveys is fifteen-year-olds enrolled in school, regardless of the grade or type of institution in which they are enrolled.

The PISA surveys use a two-stage stratified sampling design. At the first stage, schools are sampled systematically from a comprehensive national list of all eligible schools with probabilities that are proportional to a measure of size.[6] Within sampled schools, students are selected with equal probability from a list of fifteen-year-old students in each selected school.[7] From the forty-one OECD and non-OECD countries participating in the 2003 PISA data collection, for our comparative analysis we selected only thirty OECD countries for which we can also obtain statistical data regularly published in the OECD statistical yearbook *Education at a Glance* [OECD 2006].

The following variables were used in analyses based on data from PISA 2003:

a) COLLEXP – expectations to attain tertiary (i.e. college or university) education (0=no, 1=yes);[8]
b) SEX (1=female, 2=male);

[6] The measure of size was a function of the estimated number of eligible fifteen-year-old students enrolled. Individual schools in which students in this age can be enrolled were selected systematically with probabilities proportional to size, the size being a function of the estimated number of eligible (fifteen-year-old) students enrolled.
[7] See Chapter 4 of *Education at a Glance* [OECD 2005c] for a detailed description of the PISA sampling procedures and target population coverage.
[8] This means category 5 or 6 in the ISCED coding.

c) HISEI – the highest parental occupational status; [9]
d) ABIL – index of measured ability (derived from five plausible values for each literacy domain).[10]

Analytical strategy and methodology

To define composite variables representing the stratification, vocational specificity, permeability, and openness of the education system, we applied a factor analysis of the OECD statistical indicators to the data for the subset of OECD countries participating in the PISA 2003. To assess the degree of determination of college expectations at the country level for each OECD country in the PISA 2003 data set (thirty countries out of forty-one participating in the PISA 2003), we conducted a logistic regression of college expectations (COLLEXP) on parental socio-economic status (HISEI), child's measured ability (ABIL), and gender (SEX). The individual regression coefficients and the standardised (centred) coefficients of determination (Nagelkerke's R^2) for these countries were then entered into the analysis of the relationships between the stratification, openness, and selectivity of education systems on the one hand, and the degree of determination of college expectations on the other. Finally, we regressed the above variables that determine college expectations (ABIL, HISEI, Nagelkerke's R^2) on the most important characteristics of secondary and tertiary education systems.

For reasons discussed above, we computed the intra-class correlation (ICC), which in this case indicates the degree to which college expectations vary between schools. Statistically, the intra-class correlation takes between-school variance in expectations as a proportion of their total variance. The general formula for ICC_0 is:

[9] Occupational data for both the student's father and the student's mother were obtained by asking open-ended questions. The responses were coded into four-digit ISCO codes and then recoded to the international socio-economic index of occupational status (ISEI) [Ganzeboom et al. 1992]. HISEI corresponds to the higher ISEI score of either parent or to the only available parent's ISEI score. Higher ISEI scores indicate higher levels of occupational status.

[10] Students' achievements in mathematics, reading, science, and problem solving are reported on standardised composite scales (the average score is 500, standard deviation is 100 across all students in OECD countries in the PISA). Since the creation of scales was based on Item Response Theory, the data set contains five plausible values for each student instead of one fixed value. When achievement scores are used in analyses as dependent variables, all five plausible values should be used simultaneously to obtain the estimates of population parameters [OECD 2005b]. We use achievement scores only as independent or control variables, so the scale of 'ability' could have been created by averaging five plausible values for each literacy domain (obtaining four variables: MATH for mathematics, READ for reading, SCIE for science, and PROB problem solving) and computing an additive scale (MATH + READ + SCIE + PROB/4). The analysis of reliability confirmed that these variables clearly form one scale (Cronbach's $\alpha = 0.9672$).

$$ICC_0 = \frac{\sigma^2_u}{\sigma^2_e + \sigma^2_u},$$

where ICC_0 is the intra-class correlation for the null model, σ^2_u is the variance at the second (school) level, and σ^2_e is the variance at the first (individual) level. Since the college expectations variable is binary, we applied a slightly different formula (see, e.g., Snijders and Bosker [1999]):

$$ICC_1{}^{11} = \frac{\sigma^2_u}{\pi^2/3 + \sigma^2_u},$$

where $\pi^2/3$ is the variance at the first level, and $\sigma^2_{u,}$ is the variance at the second level.

The first step of the analysis involved thirty logistic regressions on data from the PISA 2003 (i.e. separately for each country),[12] aimed at assessing the net effects of measured ability, parental socio-economic status, and gender on college expectations, as well as the overall degree of determination of college expectations by these three variables (Nagelkerke's R^2). The second step of the analysis was designed to explain the differences between countries in the coefficients of determination (Nagelkerke's R^2) and in the regression coefficients associated with the variables ABIL and HISEI using indicators describing the education systems of individual nations.

To achieve this goal, two sets of regression analyses were performed with three equations in each. The first set included an equation for the overall determination of college expectations by ability, socio-economic background, and gender (dependent variable ZDETEXP), while the other two equations estimated the effect of ability and socio-economic background on expectations (dependent variables RCABIL and RCISEI): [13]

$$ZDETEXP = a + b_1*SCND + b_2*TERT \quad [1]$$
$$RCABIL = a + b_1*SCND + b_2*TERT \quad [2]$$
$$RCHISEI = a + b_1*SCND + b_2*TERT \quad [3]$$

The second set of equations tested both the gross and the net effects of specific characteristics of the tertiary education system on the determination of college expectations:

[11] Snijders and Bosker use the symbol ρ_i instead of our ICC_i [Snijders and Bosker 1999: 224].

[12] See the Appendix for the SPSS syntax for the logistic regressions.

[13] These variables are the values of the standardised regression coefficient from the logistic regression of aspirations on ability, socio-economic background, and gender.

$$ZDETEXP = a + b_1*SCND + b_2*ICC + b_3*ENROL + b_4*PRVRSC + b_5*FINAID \quad [4]$$
$$RCABIL = a + b_1*SCND + b_2*ICC + b_3*ENROL + b_4*PRVRSC + b_5*FINAID \quad [5]$$
$$RCHISEI = a + b_1*SCND + b_2*ICC + b_3*ENROL + b_4*PRVRSC + b_5*FINAID \quad [6]$$

where ICC is the intra-class correlation for college expectations, SCND and TERT are the factor scores for openness of secondary education and tertiary education respectively, ENROL is the net entry rate into tertiary education, PRVRSC is the relative proportion of private sources of funding in institutions of tertiary education (representing the actual role of tuition fees in financing tertiary education), and FINAID is the financial aid to students defined as public subsidies to households and other private entities as a percentage of total public expenditure on tertiary education.

Results

Factor analysis (PCA) was applied to the full set of eight statistical indicators and separately to the two subsets depicting secondary and tertiary education. The rotated results of PCA analysis (Table 1) confirm that the stratification of the secondary education system (indicated by the number of school types or distinct educational programmes) is strongly correlated with its vocational specificity (indicated by the proportion of fifteen-year-olds enrolled in programmes that give access to vocational studies, or direct access to the labour market and upper secondary education enrolment in general education programmes). Another well-defined dimension of a country's education system comprises enrolment rates, expenditure on tertiary education, financial aid to students, and the system's openness to private resources (indicating a demand driven system). Although the correlation of the two dimensions (SCND, TERT) is very high and significant ($r = 0.627$, $p < 0.001$), and the analysis of the full set suggests that there is clearly one strong dimension that consistently describes a country's education system as a whole (component DIM1 in Table 1), for descriptive and analytical purposes we decided to keep the two dimensions separate (SCND, TERT). For the sake of simplicity we refer to them as the 'openness of secondary education' and the 'openness of tertiary education'.

Since the OECD statistical data used to describe the openness and permeability of education systems contains missing values, and since dropping the countries with the missing data from the analyses would have reduced the number of units for multilevel analysis below a critical level, we used the regression method of imputation for the missing data.[14] Since the correlation between TERT and

[14] SPSS Missing Value Analysis was applied (a regression method augmenting estimates with random components). For details see: http://www.siue.edu/IUR/SPSS/SPSS%20Missing%20Value%20Analysis%207.5.pdf.

Table 1. Factor analysis (PCA) of the openness of secondary and tertiary education

	Before rotation		After rotation	
Variable	DIM1	DIM2	SCDN	TERT
GENSEC	0.638	0.455	0.650	–
NUMPRG	–0.922	0.177	–0.853	–
VOCAT	–0.520	0.486	–0.702	–
EXPSEC	0.668	–0.310	0.705	–
ENROL	0.721	–0.031	–	0.720
PRVRSC	0.339	0.882	–	0.615
FINAID	0.681	–0.238	–	0.618
EXPTER	0.741	0.294	–	0.793
% of VAR	45.3	18.6	53.5	47.7

Figure 1. Openness of the secondary and tertiary education systems in OECD countries (dimensions SCND and TERT)

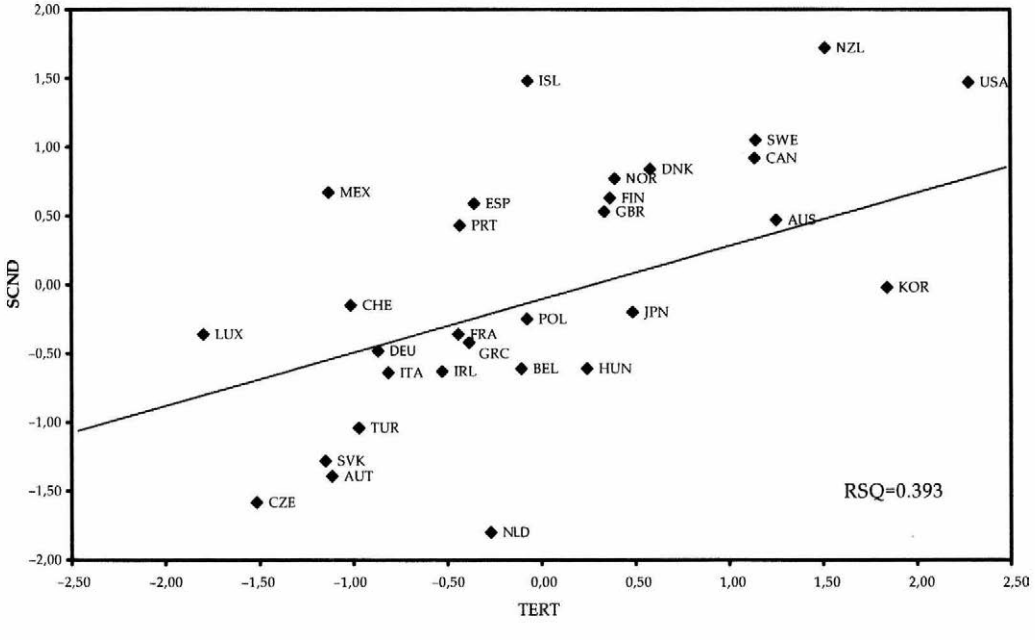
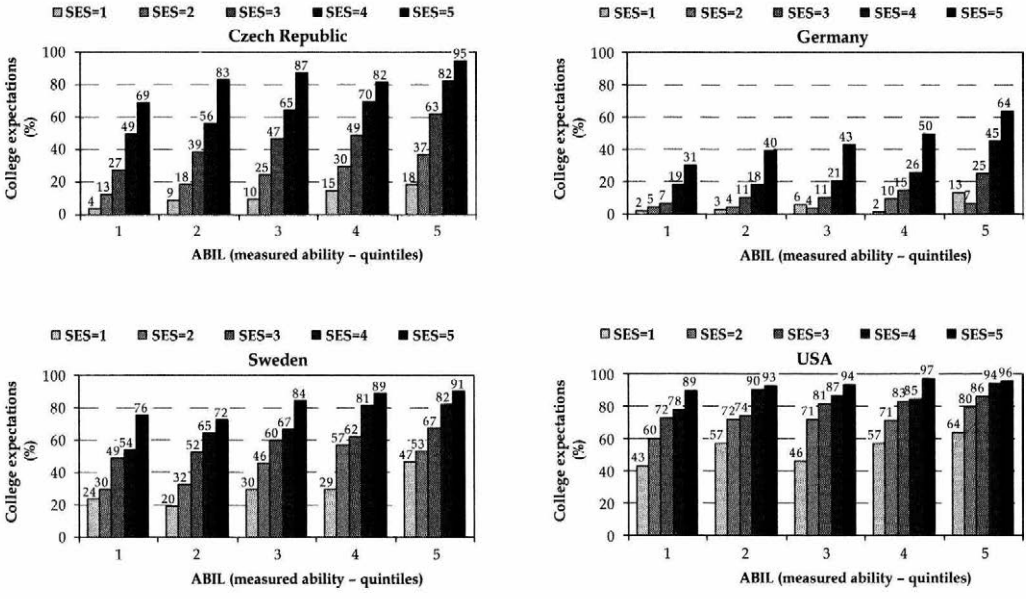


Figure 2. College expectations by measured ability (quintiles) and parental SES (quintiles)



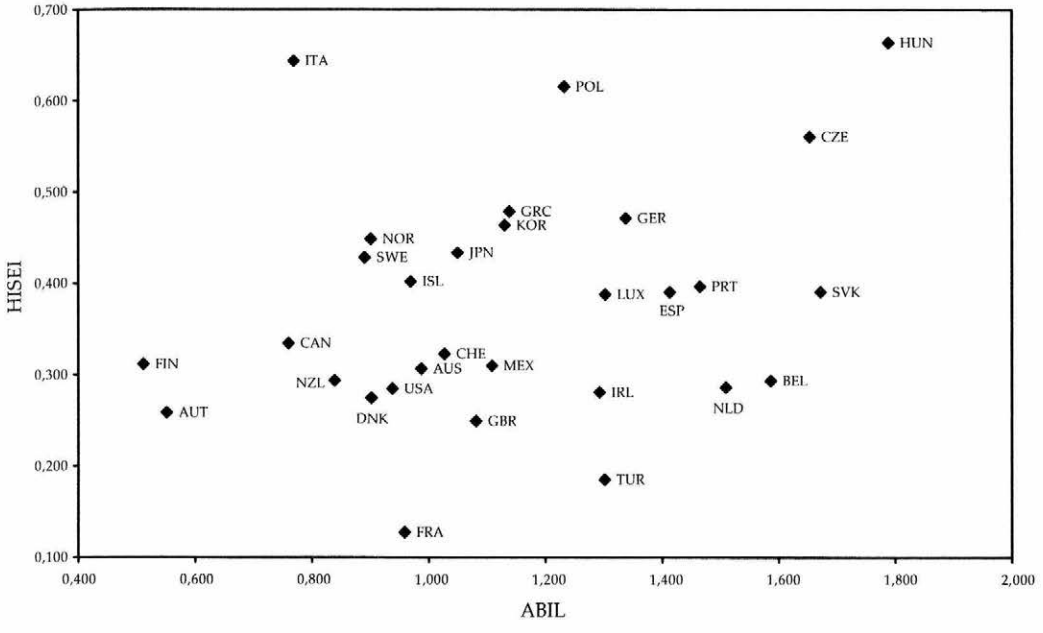
SCND was not affected by the imputation, we decided to use imputed data for further analysis.

The values of the two dimensions (principal components) in OECD/PISA countries[15] are displayed in Figure 1. At first glance, a large number of European countries (e.g. the Czech Republic, the Netherlands, Austria, Slovakia, Germany, Italy, Ireland, France, Belgium, etc.) show low levels of openness in both the secondary and tertiary systems of education. The United States, Canada, New Zealand, and Australia, on the one hand, and Sweden, Norway Denmark, and Finland, on the other, show consistently greater openness in both segments of the education system.

The results of a simple descriptive analysis of the effects of ability and parental socio-economic status in three selected countries exhibiting different levels of education system stratification (the Czech Republic, Germany, the United States and Sweden), displayed in Figure 2, reveal the different effects of socio-economic background in these three countries. In the Czech Republic, a country with one of the most stratified systems of secondary education and one of the least accessible systems of tertiary education in the OECD, only 18% of the most competent fifteen-year-olds from the lowest SES group (SES = 1) expect to achieve

[15] Hereinafter, 'OECD/PISA countries' refers to the OECD countries that participated in the PISA 2003 project.

Figure 3. Logistic regression coefficients (B) of aspiration on ability (ABIL) and socio-economic status of parents (HISEI), controlling for gender. Variables ABIL and HISEI have been standardised

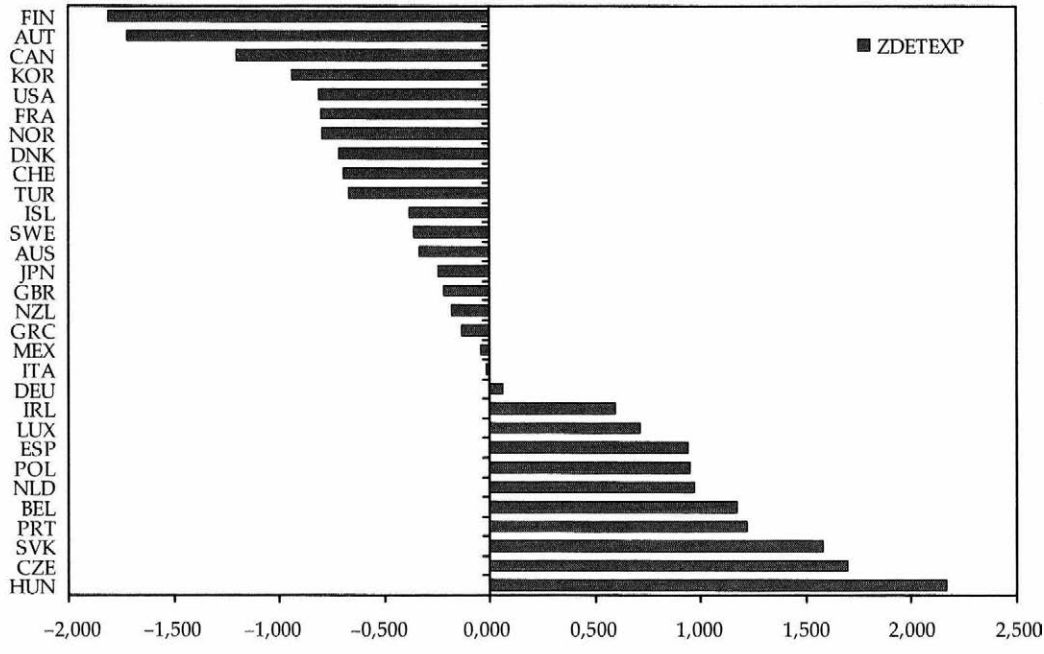


an education at the tertiary level, while in the highest SES group the figure is 95% (ratio 0.18). In the United States and Sweden – the countries with the least stratified secondary education and the most open tertiary education – highly capable adolescents from lower strata are much more likely to expect to continue on to college than their Czech counterparts (18% in the Czech Republic, compared to 64% in the US and 47% in Sweden). Thus, the contrast between the lowest and highest SES quintiles is much smaller in those countries (US: 64/96, ratio 0.66, Sweden 47/91, ratio 0.51).

The logistic regression of college expectations on ability (ABIL), parental socio-economic status (HISEI), and gender (SEX),[16] which was applied to assess the net effect of ability and parental socio-economic status on college expectations and the degree to which college expectations are determined by ability, gender, and parental socio-economic status, revealed significant differences between countries, especially in the net effect of socio-economic background. Figure 3 displays the standardised logistic regression coefficients (B) of expectations on ability (ABIL) and the socio-economic status of parents (HISEI), controlling for gender. Consistent with the results of the descriptive analysis and with hypo-

[16] The SPSS binomial logistic regression procedure was applied. See the SPSS command file in the Appendix.

Figure 4. Standardised values (Z-scores) of the model coefficient of determination (Nagelkerke's R^2) from the logistic regression of college expectations on ability, gender, and parental socio-economic status



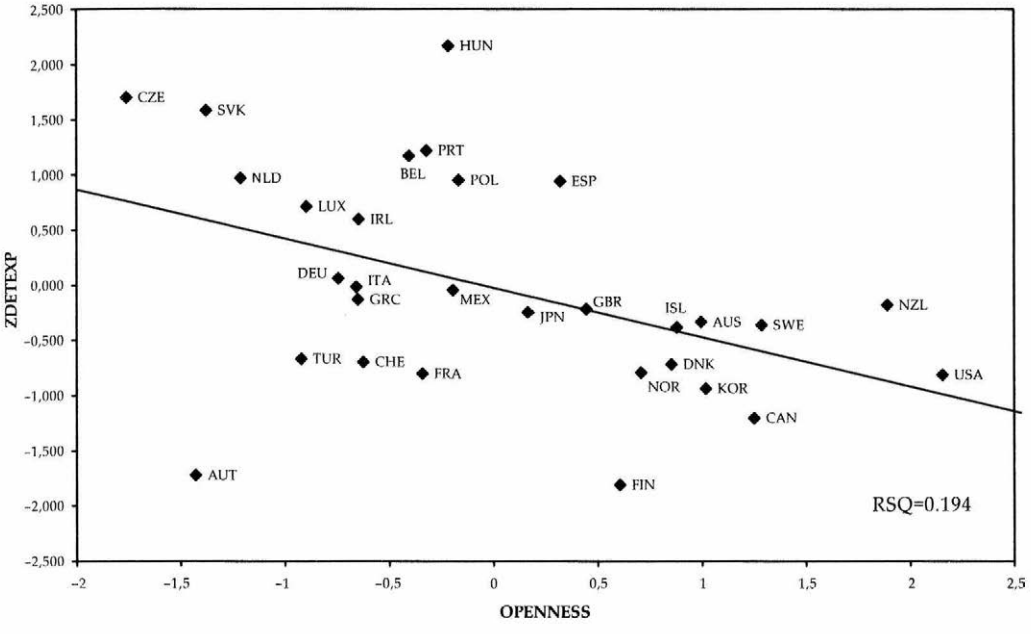
theses H1, the net effect of socio-economic status is much stronger in the Czech Republic, Germany, Hungary, Poland, and other Central European countries than in the US, Canada, Australia, France, and other countries with less stratified and more open education systems.

The overall degree to which college expectations are determined by ability, gender, and parental socio-economic status was assessed by the model coefficient of determination (Nagelkerke's R^2).[17] The values of the coefficient range from more than 0.40 (Hungary, the Czech Republic, Slovakia, Portugal, Belgium, the Netherlands, Poland, and Spain) to less than 0.25 (Denmark, New Zealand, France, the United States, Korea, Canada, Australia, and Finland).

To simplify the graphic presentation, we transformed the Nagelkerke's R^2 values to their z-scores (see Figure 4 for the results) and also conducted second-level principal component analysis, which identified a single dimension representing the openness and permeability of the education system on the whole

[17] Nagelkerke's R-Square is a modification of the Cox and Snell coefficient of determination. It divides Cox and Snell's R^2 by its maximum in order to attain a measure that ranges from 0 to 1. Therefore, Nagelkerke's R^2 will normally be higher than the Cox and Snell measure but will tend to run lower than the corresponding OLS R^2. Nagelkerke's R^2 is the most-reported of the R-squared estimates [see Nagelkerke 1991].

Figure 5. The relationship between the determination of college expectations (ZDETEXP) and the composite variable indicating openness and permeability of the education system (OPENNESS)



(variable OPENNESS).[18] As the first hypothesis (H1) predicted, we found a strong relationship between the determination of college expectations at the individual level (ZDETEXP) on the one hand, and the openness and permeability of the education system (OPENNESS) on the other.[19]

Figure 5 displays individual OECD/PISA countries in a two-dimensional space defined by the determination of college expectations (ZDETEXP) and the overall openness and permeability of the education system (OPENNESS). The figure confirms the strong relationship between the openness and permeability of the education system, assessed at the country level, and the degree of overall determination of college expectations, assessed at the individual level.

In order to test the specific effects of the relevant characteristics of education systems on the determination of college expectations,[20] we ran a series of regres-

[18] One identified component, OPENNESS, accounted for 81% of the variance with loadings 0.902 for both SCND and TERT.

[19] The regression coefficients of DETASP on SCDN, TERT and OPENNESS (b/se/sig) are: SCND (–.452/0.188/0.023), TERT (–.375/0.172/0.038), OPENNESS (–.441/0.170/0.015)

[20] There were three dependent variables: the overall determination of college aspirations by ability, socio-economic background and gender (ZDETEXP), the effect of ability on aspirations (RCABIL), and the effect of socio-economic background on aspirations (RCHISEI).

Table 2. Regression analysis of the overall determination of college aspirations (ZDETEXP)*, the effect of ability on college expectations (RCABIL), and the effect of socio-economic background at the country level

Model		Unstandardised coefficients		Standardised coefficients	t	Sig.	R^2
		B	Std. Error	Beta			
		Dependent variable= ZDETEXP					
1	(Constant)	.009	.169		.055	.957	.172
	SCND	–.452	.188	**–.415**	–2.411	.023	
2	(Constant)	–.024	.172		–.141	.889	.145
	TERT	–.375	.172	**–.380**	–2.176	.038	
3	(Constant)	–.006	.171		–.036	.971	
	SCND	–.316	.242	–.290	–1.310	.201	.196
	TERT	–.196	.219	–.198	–.896	.378	
		Dependent variable= RCABIL					
1	(Constant)	1.097	.058		18.997	.000	.309
	SCND	–.226	.064	**–.556**	–3.537	.001	
2	(Constant)	1.085	.066		16.404	.000	.096
	TERT	–.114	.066	**–.311**	–1.729	.095	
3	(Constant)	1.099	.059		18.622	.000	
	SCND	–.242	.084	**–.595**	–2.901	.007	.311
	TERT	.023	.076	.062	.304	.764	
		Dependent variable= RCHISEI					
1	(Constant)	.338	.026		12.774	.000	.100
	SCND	–.052	.029	**–.316**	–1.760	.089	
2	(Constant)	.336	.028		12.093	.000	.011
	TERT	–.016	.028	–.106	–.566	.576	
3	(Constant)	.339	.027		12.642	.000	
	SCND	–.067	.038	**–.410**	–1.763	.089	.113
	TERT	.022	.034	.151	.648	.522	

* The dependent variable ZDETEXP has been defined as the z-score of the coefficient of determination of college expectations (Nagelkerke's R^2) from the model with three independent variables: ability, gender, and parental socio-economic status.

sion analyses at the country level. The results from this exercise are displayed in Tables 2 to 5. We started with a simple model containing only two independent variables: SCND and TERT (Table 2). As for the degree of overall determination of expectations, both of these independent variables show a strong and significant effect (–.415, –.380).[21] Therefore, the assumption was confirmed that greater openness of secondary and tertiary education is associated with a weaker overall determination of expectations. The degree to which expectations are determined by ability (RCABIL) also strongly depends on the openness of secondary and tertiary education (–.556, –.311). The degree of determination of expectations by socio-economic background shows a much higher sensitivity to the openness of the secondary education system than the tertiary system.

Table 3 shows the results of regressions for the overall determination of expectations in which the composite variable 'openness of tertiary education' was broken down into the three most relevant original indicators (ENROL, PRVRSC, and FINAID); also, the between-school variance (ICC) was added to the set of independent variables. The story becomes more interesting, particularly because the between-school variance in expectations turned out to be by far the strongest predictor of their overall determination. It should be noted that this is the only variable in the whole model that remains strong and significant when it comes to net effects (before ICC was added to the model, it was the composite variable SCND, i.e. the 'openness of secondary education'). The results show that the larger the differences in college expectations at the school level (ICC), the stronger the effects of both students' socio-economic background and ability.

Importantly, when either the openness of the secondary education or between-school variance in expectations enter the model, the effects of enrolment in tertiary education and indicators of its financing (traditionally thought to be important in shaping college expectations) become negligible. The same story emerges from Table 4, which displays the results for the degree of determination of expectations (RCABIL) by ability. Again, the openness of secondary education and the between-school variance in expectations override the effects of all relevant characteristics of tertiary education, including the enrolment rate (ENROL) and its model of financing (PRVSRC, FINAID).

As for the regression analysis of the effect of family socio-economic status on college expectations (RCHISEI), the results presented in Table 5 are quite similar to those presented so far, with the only difference consisting in the fact

[21] Since the analysis was performed on all the PISA 2003 countries, i.e. we in fact worked with a full set of cases, and thus it does not make much sense to use statistical significance *stricto sensu*, we refer to it just to avoid over-interpreting the coefficients themselves, as they were produced on a very small sample of just thirty countries. On the other hand, we may assume that the thirty countries in the analysis are a sample of the larger 'population' of developed and developing countries (which may include about sixty countries), to which the results can be generalised. In this case we would use the significance level of 0.1 instead of 0.05.

Table 3. Regression analysis of the overall determination of college expectations (ZDETEXP)* at the country level

Model		Unstandardised coefficients		Standardised coefficients	t	Sig.	R^2
		B	Std. Error	Beta			
1	(Constant)	.009	.169		.055	.957	.172
	SCND	–.452	.188	**–.415**	–2.411	.023	
2	(Constant)	–1.025	.301		–3.400	.002	.354
	ICC	4.534	1.159	**.595**	3.914	.001	
3	(Constant)	.646	.909		.711	.484	.023
	ENROL	–.011	.014	–.152	–.755	.458	
4	(Constant)	.085	.283		.299	.767	.010
	PRVRSC	–.005	.010	–.099	–.519	.608	
5	(Constant)	.290	.343		.847	.405	.042
	FINAID	–.018	.017	–.206	–1.094	.284	
6	(Constant)	–.560	1.078		–.520	.609	.188
	SCND	–.526	.268	**–.500**	–1.964	.063	
	ENROL	.007	.017	.106	.436	.668	
	PRVRSC	.001	.010	.013	.065	.949	
	FINAID	.003	.020	.037	.161	.873	
7	(Constant)	–1.372	.968		–1.417	.172	.428
	SCND	.129	.323	.122	.399	.694	
	ICC	5.568	1.922	.737	2.897	.009	
	ENROL	.007	.014	.095	.456	.653	
	PRVRSC	–.005	.009	–.094	–.523	.606	
	FINAID	–.010	.018	–.118	–.578	.569	

* The dependent variable ZDETEXP has been defined as the z-score of the coefficient of determination of college expectations (Nagelkerke's R^2) from the model with three independent variables: ability, gender, and parental socio-economic status.

Table 4. Regression analysis of the effect of ability on college expectations (RCABIL)* at the country level

Model		Unstandardised coefficients		Standardised coefficients	t	Sig.	R^2
		B	Std. Error	Beta			
1	(Constant)	1.097	.058		18.997	.000	.309
	SCND	–.226	.064	**–.556**	–3.537	.001	
2	(Constant)	.700	.111		6.299	.000	.371
	ICC	1.735	.427	**.609**	4.061	.000	
3	(Constant)	1.573	.338		4.649	.000	.085
	ENROL	–.008	.005	–.291	–1.490	.149	
4	(Constant)	1.071	.107		10.033	.000	.001
	PRVRSC	.001	.004	.035	.182	.857	
5	(Constant)	1.245	.126		9.870	.000	.078
	FINAID	–.009	.006	–.280	–1.515	.141	
6	(Constant)	1.009	.368		2.743	.012	
	SCND	–.246	.092	**–.608**	–2.689	.014	
	ENROL	–.001	.006	–.027	–.126	.901	.359
	PRVRSC	.004	.003	.202	1.113	.278	
	FINAID	.002	.007	.051	.251	.804	
7	(Constant)	.824	.367		2.245	.036	
	SCND	–.097	.122	–.239	–.791	.438	
	ICC	1.268	.729	**.436**	1.740	.097	.444
	ENROL	–.001	.005	–.034	–.163	.872	
	PRVRSC	.003	.003	.138	.782	.443	
	FINAID	–.001	.007	–.041	–.202	.842	

* The dependent variable RCABIL has been defined as the standardised regression coefficient for ability (ABIL) in the model with three independent variables: ability, gender, and parental socio-economic status.

Table 5. Regression analysis of the effect of family socio-economic status on college expectations (RCHISEI)* at the country level

Model		Unstandardised coefficients		Standardised coefficients	T	Sig.	R^2
		B	Std. Error	Beta			
1	(Constant)	.338	.026		12.774	.000	.172
	SCND	–.052	.029	**–.316**	–1.760	.089	
2	(Constant)	.208	.049		4.269	.000	.354
	ICC	.568	.187	**.497**	3.031	.005	
3	(Constant)	.355	.145		2.448	.022	.023
	ENROL	.000	.002	–.035	–.172	.865	
4	(Constant)	.301	.042		7.145	.000	.010
	PRVRSC	.002	.001	.208	1.104	.279	
5	(Constant)	.401	.051		7.905	.000	.042
	FINAID	–.004	.002	–.286	–1.550	.133	
6	(Constant)	.220	.167		1.317	.202	
	SCND	–.059	.041	–.357	–1.430	.168	
	ENROL	.002	.003	.144	.606	.551	.188
	PRVRSC	.002	.002	.287	1.436	.166	
	FINAID	–.002	.003	–.156	–.698	.493	
7	(Constant)	.126	.163		.771	.450	
	SCND	.017	.054	.100	.305	.764	
	ICC	.644	.324	**.540**	1.991	.060	.428
	ENROL	.001	.002	.136	.612	.547	
	PRVRSC	.002	.001	.208	1.091	.288	
	FINAID	–.004	.003	–.270	–1.242	.229	

* The dependent variable RCHISEI has been defined as the standardised regression coefficient for family socio-economic status (HISEI) in the model with three independent variables: ability, gender, and parental socio-economic status.

that the between-school variance is the only independent variable in the model showing a strong and significant effect. As for the role of tuition fees (PRVSRC) and financial aid to students, it is interesting to see that in the final model (Table 5, model 7) their effects go in the direction one would expect: the presence of tuition fees (PRVRSC) increases the role of socio-economic background in the formation of expectations (.208), while the presence of financial aid to students tends to eliminate it (–.270). However, these effects are not statistically significant, and also, as already noted, largely overridden by the effects of secondary school system stratification. Given these results, we find strong support for hypothesis H2 (as well as its specifications: H2a and H2b).

Conclusion

The analysis of the OECD data confirmed the hypothesis that the degree of stratification in the secondary education system, together with its vocational specificity, constitutes one dimension indicative of the permeability of the secondary education system (assumption A1). We also found that there is a strong association between the permeability of secondary education and the openness of tertiary education (assumption A2). These two intertwined characteristics of an education system strongly predict the degree to which college expectations are determined by socio-economic background, ability, and gender (H1).

The series of regression analyses carried out on the country level produced strong evidence supporting the hypothesis that the most important characteristics of an education system that generate a strong degree of determination of college expectations by ability and socio-economic background pertain primarily to secondary, not tertiary, education. In this regard, the decisive aspects of secondary education are the degree of secondary school system stratification and vocational specificity on the one hand, and between-school variance in college expectations (measured by the intra-class correlation) on the other. At the country level, these characteristics of the secondary school system largely override the effects of the characteristics of tertiary education, such as the role of tuition fees and financial aid to students. It should be emphasised that the results of our analysis and our main conclusions are not at odds with research that has shown that, at the individual level, the actual and perceived levels of tuition fees, student financial aid, and the factual and perceived 'openness' or 'closedness' of the tertiary education system, actually may matter a great deal. These questions will be on the agenda of our longitudinal research we launched in 2003 (PISA-L, fifteen-year-olds) and 2004 (first-year university students).

As for the main message of our analysis for educational policy, we believe that we have gone a step further in assessing the role of the institutional structures of education systems and the degree of their openness and permeability in the formation of college expectations of pupils. Our analysis strongly supports

the idea that in order to increase equity in access to higher education, policymakers should focus primarily on the secondary school system, particularly on the existing structural conditions for the reproduction of inequality in access to higher education through secondary school system stratification and other sources of differences between schools.

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References

Alexander, Karl L. and Bruce K. Eckland. 1975. 'Contextual Effects in the High School Attainment Process.' *American Sociological Review* 40: 402–16.

Blau, Peter M. and Otis D. Duncan. 1967. *The American Occupational Structure.* New York: Wiley.

Buchmann, Claudia and Ben Dalton. 2002. 'Interpersonal Influences and Educational Expectations in 12 Countries: The Importance of Institutional Context.' *Sociology of Education* 75: 99–122.

Duncan, Otis D. 1968. 'Ability and Achievement.' *Eugenics Quarterly* 15: 1–11.

Ganzeboom, Harry B. G., Paul M. de Graaf and Donald J. Treiman, with Jan de Leeuw. 1992. 'A Standard International Socioeconomic Index of Occupational Status.' *Social Science Research* 21: 1–56.
Haller, Archibald. O. and Alejandro Portes. 1973. 'Status Attainment Processes.' *Sociology of Education* 46 (1): 51–91.
Han, Wan S. 1968. 'Discrepancy in Socio-economic Level of Aspirations and Perception of Illegitimate Expediency.' *American Journal of Sociology* 74: 240–7.
Han, Wan S. 1969. 'Two Conflicting Themes: Common Values versus Class Differential Values.' *American Sociological Review* 34: 679–90.
Hauser, Robert M. 1972. 'Disaggregating a Social-Psychological Model of Educational Attainment.' *Social Science Research* 11: 59–188.
Hauser, Robert M., Shu-Ling Tsai and William H. Sewell. 1983. 'A Model of Stratification with Response Error in Social and Psychological Variables.' *Sociology of Education* 56: 20–46.
Herriott, Robert E. 1963. 'Some Determinants of Educational Aspirations.' *Harvard Educational Review* 33: 157–177.
Hyman, Herbert H. 1953. 'The Value Systems of Different Classes: A Social Psychological Contribution to the Analysis of Stratification.' Pp. 426–442 in *Class, Status and Power: A Reader in Social Stratification*, edited by R. Bendix and S. M. Lipset. Glencoe: Free Press.
Jencks, Christopher. 1972. *Inequality: A Reassessment of the Effect of Family and Schooling in America*. New York: Basic Books.
Kahl, Joseph A. 1953. 'Educational and Occupational Aspirations of "Common Man" Boys.' *Harvard Educational Review* 23: 186–203.
Karabel, Jerome and Alexander W. Astin. 1975. 'Social Class, Academic Ability, and College "Quality".' *Social Forces* 53: 381–398.
Kerckhoff, Alan C. 1976. 'The Status Attainment Process: Socialization or Allocation?' *Social Forces* 55: 368–381.
Kerckhoff, Alan C. 1977. 'The Realism of Educational Ambitions in England and the United States.' *American Sociological Review* 42: 563–571.
Kerckhoff, Alan C. 2001. 'Education and Social Stratification Processes in Comparative Perspective.' *Sociology of Education* Extra Issue: 3–18.
Kerckhoff, Alan C. and Richard T. Campbell. 1977a. 'Black-White Differences in the Educational Attainment Process.' *Sociology of Education* 50: 15–27.
Kerckhoff, Alan C. and Richard T. Campbell. 1977b. 'Race and Social Status Differences in the Explanation of Educational Ambition.' *Social Forces* 55: 701–714.
Müller, Walter and Yossi Shavit. 1998. 'The Institutional Embeddedness of the Stratification Process: A Comparative Study of Qualifications and Occupations in Thirteen Countries.' Pp. 1–48 in *From School to Work: A Comparative Study of Educational Qualifications and Occupational Destinations*, edited by Y. Shavit and W. Muller. Oxford: Oxford University Press.
Nagelkerke, N. J. D. 1991. 'A Note on a General Definition of the Coefficient of Determination.' *Biometrika* 78: 691–692.
OECD. 2005a. *PISA 2003 Data Analysis Manual*. Paris: OECD (available at https://www.oecd.org/dataoecd/35/32/35002862.pdf).
OECD. 2005b. *PISA 2003 Technical Manual*. Paris: OECD.
OECD. 2005c. *School Factors Related to Quality and Equity. Results from PISA 2000*. Paris: OECD.
OECD. 2003. *Education at a Glance 2003*. Paris: OECD.
OECD. 2004. *Education at a Glance 2004*. Paris: OECD.
OECD. 2005d. *Education at a Glance 2005*. Paris: OECD.

OECD. 2006. *Education at a Glance 2006*. Paris: OECD.
Reissman, Leonard. 1953. 'Levels of Aspiration and Social Class.' *American Sociological Review* 18: 233–242.
Sewell, William H. 1961. 'Social Class and Childhood Personality.' *Sociometry* 24: 340–356.
Sewell, William H. 1963. 'Some Recent Developments in Socialization Theory and Research.' *The Annals of the American Academy of Political and Social Science* 349: 163–181.
Sewell, William H. and Robert M. Hauser. 1972. 'Causes and Consequences of Higher Education: Models of the Status Attainment Process.' *American Journal of Agricultural Economics* 54: 851–861.
Sewell, William H. and Robert M. Hauser. 1975. *Education, Occupation and Earnings.* New York: Academic Press.
Sewell, William H. and Vimal P. Shah. 1967. 'Socioeconomic Status, Intelligence, and the Attainment of Higher Education.' *Sociology of Education* 40: 1–23.
Sewell, William H. and Vimal P. Shah. 1968a. 'Social Class, Parental Encouragement, and Educational Aspirations.' *American Journal of Sociology* 73: 559–572.
Sewell, William H. and Vimal P. Shah. 1968b. 'Parents' Education and Children's Educational Aspirations and Achievements.' *American Sociological Review* 33: 191–209.
Sewell, William H., Archibald O. Haller and Murray A. Straus. 1957 'Social Status and Educational and Occupational Aspirations.' *American Sociological Review* 22: 67–73.
Sewell, William H., Archibald O. Haller and Alejandro Portes. 1969. 'The Educational and Early Occupational Attainment Process.' *American Sociological Review* 34: 82–92.
Sewell, William H., Archibald O. Haller and George W. Ohlendorf. 1970. 'The Educational and Early Occupational Status Attainment Process: Replication and Revision.' *American Sociological Review* 35: 1014–1027.
Simmons, Roberta G. and Morris Rosenberg. 1971. 'Functions of Children's Perceptions of the Stratification System.' *American Sociological Review* 36: 235–49.
Snijders, Tom A. B. and Roel J. Bosker. 1999. *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. London: Sage Publisher.
Turner, Ralph H. 1960. 'Sponsored and Contest Mobility and the School System.' *American Sociological Review* 25: 855–867.
TIMSS (Third International Mathematics and Science Study). 1995. IEA. Retrieved http://www.iea.nl/timss1995.html.
Williams, Trevor H. 1972. 'Educational Aspirations: Longitudinal Evidence in Their Development in Canadian Youth.' *Sociology of Education* 45: 107–133.
Wilson, Kenneth L. and Alejandro Portes. 1975. 'The Educational Attainment Process: Results from a National Sample.' *American Journal of Sociology* 81: 343–63.

Appendix

Table A1. Statistical indicators used in the analysis of education systems

Acronym	Description	Source
GENSEC	Upper secondary education enrolment in general education programs (2003)	EaG, C2.1
NUMPRG	Number of school types or distinct educational programmes available to fifteen-year-olds (2003)	EaG, D6.1
VOCAT	Proportion of fifteen-year-olds enrolled in programmes that give access to vocational studies at the next program level or direct access to the labour market (2003)	EaG, D6.1
EXPSEC	Expenditure on educational institutions of primary, lower secondary, and primary education as a percentage of GDP from public and private sources (2002)	EaG, B2.1
ENROL	Net entry rates into tertiary education (2003)	EaG, C2.2
PRVRSC	Relative proportion of private sources of funding on institutions of tertiary education (percentage of total expenditure, 2002)	EaG, B.3.2
FINAID	Financial aid to students: public subsidies for households and other private entities as a percentage of total public expenditure on tertiary education (percentage of total expenditure on tertiary education, 2002)	EaG, B.5.2
EXPTER	Expenditure on tertiary educational institutions as a percentage of GDP from public and private sources (2002)	EaG, B2.1

Table A2. Correlations between indicators used in the analysis of education systems

	GENSEC	NUMPRG	VOCAT	EXPSEC	ENROL	PRVRSC	FINAID	EXPTER
GENSEC	**1.000**							
NUMPRG	-0.477	**1.000**						
VOCAT	-0.295	0.496	**1.000**					
EXPSEC	0.261	-0.612	-0.343	**1.000**				
ENROL	0.275	-0.672	-0.221	0.431	**1.000**			
PRVRSC	0.531	-0.162	0.191	-0.054	0.240	**1.000**		
FINAID	0.268	-0.699	-0.314	0.302	0.460	0.050	**1.000**	
EXPTER	0.464	-0.580	-0.242	0.466	0.399	0.445	0.345	**1.000**

SPSS Commands

SPSS commands use to run logistic regression of educational aspirations on ability, parental socio-economic status and gender.

a) commands used to assess the coefficient of determination (Nagelkerke's R^2):

```
LOGISTIC REGRESSION VAR=COLLEXP
    /METHOD=ENTER abil hisei sex
    /CONTRAST (sex)=Indicator
    /CRITERIA PIN(.05) POUT(.10) ITERATE(20) CUT(.5) .
```

b) commands used to assess the net effects of parental socio-economic status and ability for descriptive analyses (ABIL and HISEI transformed into quintiles):

```
split file by cnt2.
LOGISTIC REGRESSION VAR=COLLEXP
    /METHOD=ENTER abil5 isei5 sex
    /CONTRAST (isei5)=Indicator
    /CONTRAST (abil5)=Indicator
    /CONTRAST (sex)=Indicator
    /CRITERIA PIN(.05) POUT(.10) ITERATE(20) CUT(.5) .
split file off.
```

Graduates in the Labour Market: Does Socio-economic Background Have an Impact? The Case of Hungary*

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Abstract: This article looks at the status attainment process of young Hungarian graduates, devoting special attention to the impact of social origin, defined as the education and occupation of parents. The authors' estimates show that graduates from high status families enjoy notable advantages in the labour market, even when type of education, field of study, and a range of labour market experience factors are held constant. The greatest wage-premium for coming from a 'good' family is measured for men, occurring four-to-five years after graduation. Patterns of status inheritance are found to be gender-dependent, with women being more influenced by their social background at earlier phases of their careers. The authors argue that the substantial growth in the number of graduates and the increasing variety of jobs they occupy contribute to a social-selection process, moving further up from the educational ladder to the labour market. The authors describe possible mechanisms driving the direct inheritance of social advantages, but further research is needed to explore them in detail.

Keywords: higher education, social mobility, graduates, graduate labour market, post-socialist country

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Introduction and theoretical background: direct and indirect parental effects

The intergenerational transmission of social and economic advantages has long been a focal subject of different disciplines in the social sciences. Particularly

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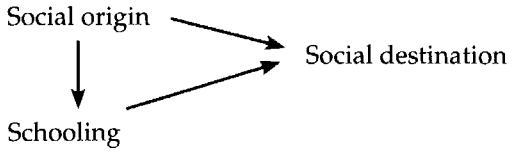
scholars in sociology and in economics have widely studied the persistence of social and economic inequalities and how advantages are inherited from generation to generation. Although departing from different theoretical and methodological standpoints, the overlap in the focus of the two disciplines is noteworthy [Morgan 2006]. Growing inequalities in the labour market and the non-increasing trend of social mobility in industrialised societies have made the issue of social inheritance particularly timely. Scholars in both fields are actively calling for more attention and new insight into the problem [see, e.g., Bowles and Gintis 2002; Goldthorpe and Jackson 2006].

To investigate the mechanisms behind the pure correlation of social origin and social destination, attempts were made to decompose the relationship into its components. The idea of differentiating between the indirect and direct effects of origin appears in sociology and economics [Treiman 1970; Blau and Duncan 1967; Bowles and Gintis 2002]. First, parental social standing has a major impact on educational attainment and influences the later opportunities of offspring in life through the educational channel. Children from families of a higher social standing receive more and better education, and it is for this reason that they obtain better jobs, bigger salaries, and higher social prestige. This is the 'indirect effect' on social background. At the same time, the impact of social origin may operate independently of schooling and result in significant differences in the social destination of individuals with a similar educational attainment but a different social background. This is the 'direct effect' of social origin. Figure 1 shows a simple illustration of this distinction. The notions of 'social origin' and 'social destination' can be replaced with 'parental income' and 'income' – or, indeed, by any other appropriate indicators.

In sociology, where both functionalist and conflict theory argue that education is becoming the main determinant of social success, and empirical evidence seems to support this hypothesis, the idea of the direct transmission of social status has received relatively little attention. Noteworthy exceptions are studies by Breen and Goldthorpe, which systematically challenge the propositions of functionalist theory and even the basic ideas of meritocracy [e.g. Goldthorpe 1985; Breen and Goldthorpe 1999, 2001; Goldthorpe and Jackson 2006]. They present their own empirical results suggesting that the importance of direct parental effects is not declining at all – at least not in contemporary Britain.

Looking at the status attainment process of the 1958 cohort in the National Child Development Study (NCDS), Breen and Goldthorpe [1999] found that parental social class continued to have a significant effect on the social class of the respondents even when education, abilities, and even effort – all the possible components of 'merit' – are controlled for. In another study [Breen and Goldthorpe 2001], they compare the 1958 cohort from the NCDS and the 1970 cohort from the British Cohort Study. The association between class origin and class destination here was found to be largely the same in the two cohorts, with education having a remarkably smaller influence on individuals' relative mobility chances in the

Figure 1. The process of status attainment



younger cohort. This means that by the 1990s there was more room for the effect of direct channels of social inheritance than there had been a decade before. In an earlier study, Breen [1998] looked at second-level school-leavers from the Republic of Ireland. Decomposing the total impact of social origin into its direct and indirect components, he found that the influence of social origin on the odds of avoiding unemployment is only partially mediated through education.

A recent paper by Evans and his colleagues [Evans et al. 2005] suggests that the direct effects of social origin also exist outside Anglo-Saxon societies. In a comparison of the process of status attainment in thirty-one countries all over the world they found that in twenty of these countries parental background plays a role in shaping occupational status even when respondents' education is controlled for. Parental background in this case is measured by the parents' education, the father's occupation, and the number of books in the parental home. Interestingly, Evans and his colleagues find that the direct effect of a scholarly culture (as measured by the number of books) tends to be stronger in post-communist countries (including Hungary) than elsewhere.

In economics, the role of parental background is discussed in the returns to education literature for two primary reasons. First, estimates derived from the classic Mincerian wage estimation [Mincer 1974] show that education and labour market experience do a relatively poor job of explaining wage variation – they account for only about 25–35% of the total variance [Card 1998]. A large proportion of wage variation between individuals with similar education and other measurable factors (typically age, gender, on the job training) remains unexplained [Rosen 1977]. Such observations have called attention to the possible role of parental background in contributing to wage differences between the similarly educated.

Second, it has been shown that when important determinants of wages are excluded from wage equations, the parameters for schooling are likely to be biased. Depending on the nature of the interrelationship between unobserved variables and schooling, omitted variables may lead to either an under- or overestimation of these measures (see Card [1998] for a comprehensive discussion, and Galasi [2003] for the Hungarian application). Among the (often) unobserved variables, school quality and ability are considered to be of major importance – both are heavily interrelated with parental background. Consequently, family background measures are often applied and interpreted as proxies for school quality [e.g. Grubb 1993] or ability [e.g. Leibowitz 1974].

In wage regressions, when a proxy for parental environment is included, parental background is systematically found to be positively correlated with income when education – but not ability – is controlled for [e.g. Grubb 1993; Ashenfelter and Zimmerman 1997[1]]. However, when ability or even measures of school quality are added to the models, the findings are less conclusive. Several studies found that the existence of a statistically significant, positive direct parental effect varies by gender and/or cohorts studied [Altonji and Thomas 1995[2]; Leibowitz 1974]. In other studies, however, the inclusion of ability-indexes and/or school-quality measures seems to entirely wipe out the parental effect [e.g. Taber 2001].

The case of graduates

In the discussion so far we have not distinguished between different groups or strata in society. Now we will argue that the case of graduates requires special attention when the problems of status-attainment are in focus. We will begin by providing a brief overview of the graduate labour market today and then explain why the characteristics of this market are likely to promote direct social inheritance. Possible mechanisms driving the direct effect of social origin will also be discussed.

It is common knowledge that the number and share of graduates in the populations of most European (and other) countries increased dramatically in recent decades [e.g. Shavit and Blossfeld 1993]. In some countries, the increase in the number of graduates has led to an excess supply, with a rising level of unemployment among graduates and a decrease in the additional benefit from holding a degree. But even where this has not happened, what has is that the number of occupations that traditionally require a higher education degree has not correspondingly increased with the number of potential applicants [Teichler 2000]. Instead, in a number of cases, there has been an upgrading of occupations previously filled by non-graduates [Mason 1996], whereas in other cases graduates are taking jobs for which, strictly speaking, higher education would not usually be necessary. This leads to a radical increase in the heterogeneity of labour market positions filled by graduates, so that graduates are just as likely to hold a lower-level job or be unemployed as they are to pursue a classic or 'high-flying' career. With the growing variety of positions taken by graduates, the heterogeneity of available earnings is also increasing.

In Hungary, the expansion of higher education was held back by the socialist regime and only started after 1989–1990[3]. Having been far below the standard European level for decades, the share of graduates more than doubled between

[1] Cited in Card [1998].

[2] Cited in Card [1998].

[3] In the past the Hungarian system of higher education did not differentiate between BA and MA degrees. This is a recent development. A 'higher education degree' refers to a

1990 and 2000[4]. However, in the 1990s the rapid increase in the labour supply was accompanied by an increasing demand for educated employees, and returns to education in graduate jobs continued to grow until 1998, with graduate unemployment rates remaining far below the national average [Galasi 2004a]. Statistics for more recent years indicate that the privileges associated with a higher education degree have decreased somewhat.[5] Between 1998 and 2002, the wage premium for a higher education degree decreased from 73% to 62%. By 2004 it had become significantly more likely than before [Galasi 2004b] that young graduates had started their careers in what were previously non-graduate occupations (administrative and clerical jobs, intermediate sales and personal services, agriculture and forestry occupations).

Given the supply of graduates in the labour market and the increasing variety of graduate careers, the question arises of how and based on what criteria graduates will be located – or locate themselves – among the various labour market outcomes. Can educational attainment remain an effective signal for the employer, or will other criteria gain room in the selection process? There is evidence that when there is a substantial supply of applicants with a similar type of education employers are more likely to apply selection criteria other than the level of education itself. A range of personality factors start to play a role in the selection process and personal contacts are also more intensively mobilised. Below we argue that these trends are likely to privilege graduates who come from well-educated and high-prestige families.

There is a variety of research evidence suggesting that today cultural resources – cognitive as well as non-cognitive skills – play a significant role in the graduate labour market. In a series of interviews conducted with employers of graduates in Great Britain, Brown and Scase [1994], for example, found that in job interviews questions relating to the applicant's hobbies, greatest achievement in life, sports activities, or travel experiences are becoming more and more important. The ultimate function of such questions is to select people with outstanding generic skills – among which communication and interpersonal skills are of major importance – for well-paid and high-status positions. It is therefore not a set of particular skills or technical knowledge but the person as a whole, a 'personality package', that companies want to buy. Other studies also suggest that, besides formal education, a range of 'soft' factors, such as effort, cognitive abilities, social skills, and personal characteristics, play an important role in personnel recruitment, especially for managerial jobs, but even for jobs in sales and person-

degree earned from an institute of tertiary education, typically after four or five years of study. The typical age at graduation used to be twenty-three, although it is currently increasing.

[4] Growing from 25 822 to 57 056 between 1990 and 2000 [Fazekas and Varga 2005].

[5] For example, among graduates aged 20–29 years old, 3% of those with a college degree were unemployed in 2000, but 4% in 2002, while the related ratios are 3% and 7% for university graduates [Róbert 2004].

al services. Jackson and her colleagues [Jackson, Goldthorpe and Mills 2005], for example, looked at job advertisements in British local and national newspapers and found that references to the preferred personality factors often appear next to the very general requirement of holding a higher education degree.

An international graduate survey conducted in 1999 suggests that such findings can be generalised to other countries. In five out of eleven countries, 'personality' was selected by graduates as the most important factor in getting their first job after graduation, and it was rated highly in other countries, too. The proportion of those who considered personality a very important or an important factor ranged between 57% and 84% [Blaskó 2002a].

Like the authors mentioned above, we suggest that the desired personality factors for high prestige labour market positions are not independent of social background. Instead, they reflect middle-class values and attitudes and correlate with cultural capital, so that they are inherited in families in the higher social strata.

In addition to cultural factors, social (or network) capital is again likely to improve the labour market prospects of graduates with a good social background. Since employers claim that one of the most effective ways of filling well-paid positions is through employer referral [e.g. Kugler 1997], it is not surprising that social networks are widely used in the graduate labour market. Furthermore, in a situation of intense supply in the labour market, it is becoming increasingly efficient for employers to reduce searching costs by drawing on personal contacts or employee referrals [Rosenbaum et al. 1990], thus making social (or network) capital even more valuable. Empirical evidence does support the idea that personal contacts play an important role in finding a (good) job in the graduate labour market. In the 1999 European graduate survey cited above, 15% to 54% of the graduates in the participating countries claimed that they had found their first job via personal network [Brennan et al. 2001]. In a recent employer survey in Hungary, informal routes – such as utilising personal or costumer contacts – were mentioned as some of the most important search methods by graduate employers in all investigated sectors [*Diploma* 2006]. In such an environment, potential employees from higher status families can benefit either directly from the social network of their parents or from networking skills acquired at home [e.g. Lam and Schoeni 1993].

Financial resources are likely to contribute to the success of graduates in the labour market as much as they promote the success of other groups of employees. They also strengthen the link between social origin and destination in similar ways they do this for others. Hauser and Daymont [1977] argue that a better financial standing may lead to better options because it affords a person with time to search or wait for a good job. They suggest that higher income in the childhood family leads to higher income expectations, and finally they also refer to the classic manner of wealth inheritance. Hungarian examples come from some sporadic interviews we carried out with graduates, where we found that parental support allowed time for extra-curricular activities (such as a long journey abroad), which in turn helped the graduate to further improve the skills and knowledge that are

highly valued by employers. In some professions (e.g. law, medicine), graduates spend several years in poorly paid or even fee-paying training programmes after finishing university. Finally, starting up one's own business with the financial help of the parents is also a choice.

Empirical findings from research focusing on the status attainment of graduates are not fully conclusive in determining the relationship between origin and destination. An early study in the field [Hout 1988] showed that in a highly select group of American university graduates all the interaction between social origin and destination had disappeared. Conversely, several more recent studies in Great Britain found at least some additional premia for having a diploma among graduates from better-off families [see, e.g., Smith, McKnight and Naylor 2000; Naylor, Smith and McKnight 2002; Blaskó 2002b]. In Hungary, no focused research of this kind has yet been carried out. However, general social mobility studies have shown an increasing level of social reproduction in the higher strata of society – especially among the younger generations [see Bukodi 2002; Róbert and Bukodi 2004]. No information, however, is available on the share of direct and indirect factors determining these trends.

Data, design, and variables

In the following sections we will first introduce the data set used in our analysis and then describe the indicators that were applied. We will look at the social and economic success of young Hungarian graduates at two early stages in their career and relate their position to their social origin – keeping a set of educational and labour market characteristics constant. This way, we hope to tell whether status reproduction in Hungary is only taking place in the education system, or whether other mechanisms also influence this process. The measures of 'success' we selected are based on the economic as well as the sociological tradition, and parallel models are also introduced, one of which contains a social prestige scale as the dependent variable and the other monthly net earnings. To these models we add a third set of (logistic) models estimating the odds of being unemployed for any short period of time in the first four years after graduation. In the end of this section, the issue of selectivity in these data will also be considered.

Data[6]

For the purposes of this analysis, we used a panel data set on the educational and labour market experiences of Hungarian graduates. The first wave of the survey was conducted on a cohort that graduated from full-time tertiary education in 1999 and it was administered one year after their graduation, in Septem-

[6] Data collection was commissioned by the National Institute for Lifelong Learning (Nemzeti Felnőttképzési Intézet)

ber 2000. The second wave was completed in February 2004. In the first wave, questionnaires were sent out by post to every member of the target population. In the second one, respondents who provided a phone number were contacted over the phone. In 2000, 22% of the questionnaires were returned, resulting in a total sample of 5808. Out of this population, 2242 respondents were successfully interviewed in the second wave, and non-response to key questions in the survey reduced the sample somewhat further. The sample clearly suffered from the problem of non-response, to which we will return later.

Because information on parental education and occupation is only available for those who participated in the second survey, we used this smaller subsample throughout our analyses. For the purpose of our final models, we selected only those who had said their main activity was work at the time of the survey. In 2000 there were 1680 graduates working, and in 2004 there were 1791. Owing to non-responses to questions relating to wage and occupation, and the limited availability of information on institutional quality, the case number was further reduced in the various models.

Economic and social destinations

Economic and social destination will first be measured by the (natural logarithm of) net monthly wage and by the (natural logarithm of) occupational prestige scores (SIOPS) of the respondent, respectively. In this way we aim to differentiate between two somewhat different rewards in the labour market: financial credits on the one hand and social credentials on the other. The wage level is the classic measure of labour market potential in the related economic literature, but it is rarely included in social mobility analyses. Having concerns about the reliability of our data on working time, we decided to include net monthly wages in September 2000 and February 2004 in our estimations.

The Standard Occupational Prestige Score (SIOPS) was originally designed by D. Treiman [1977] and is a commonly used indicator of social position in social mobility studies. In our models, the updated 1996 version of the scale was used [Ganzeboom and Treiman 1996]. The SIOPS is based on a highly standardised, internationally used ranking of occupations taken from ISCO (International Standard Classification of Occupations) according to their subjectively perceived prestige. Theory suggests that the social prestige of occupations reflects differentials in control over scarce but desirable resources, including knowledge, skills, property, and also power and privileges. This way, social prestige is expected to reflect a wide range of differentials linked to occupations and is widely used as a complex indicator of social status. International comparisons suggest a surprisingly high level of correlation between SIOPS in different countries [e.g. Treiman 1977]. To make interpretation easier and the parameters comparable, we use the natural logarithm of SIOPS as the outcome variable.

A third possible measure of labour market success is the occurrence [a 0-1 distinction indicating whether someone has been unemployed for a while (1) or not (0)] of unemployment. Despite the generally low level of graduate unemployment in Hungary, we found that nearly 18% of this new and young cohort of graduates experienced unemployment between September 1999 and January 2004, with the median number of months spent out of work being six. Experience of unemployment was measured using a binary variable indicating whether the respondent had any experience of unemployment after graduation.

Independent variables

The family background of respondents was proxied by four variables: the highest level of education of the mother (1) and the father (2) and the occupational prestige (SIOPS) of the mother (3) and the father (4). All the information relates to the time when the respondent was fourteen years old.

We reduced the parents' education indicators to two dummies which differentiate between mothers with or without a higher education degree, and fathers with or without a degree. About 27% of our graduates reported having a mother and 34% a father with a higher education degree. Although it is not the aim of this study to uncover the mechanisms that underlie the transmission of family background, the relevant literature gives guidance about the possibilities. Generally, the education of the parents is assumed to affect human (or cultural) resources by influencing the quality and quantity of time spent with the children [Bourdieu 1973; Leibowitz 1974]. The stock of a person's cultural assets (e.g. how many books they have, what musical instruments they own, etc.), reading habits, and the frequency of cultural activities such as visits to museums, theatres, etc., in the parental family have also been shown to relate to the parents' education and to influence the educational and occupational outcomes of the offspring [e.g. Róbert 1991; Blaskó 2003; Evans et al. 2005]. The parents' education is therefore used in this analysis as the primary proxy for cultural resources other than the education provided to the child.

The parents' and especially the father's occupations are more closely linked to the financial circumstances of the family. Still, the SIOPS of the parents in our study does not merely serve as a proxy for income and wealth but also as a proxy of labour market potentials in a more general sense. By representing social prestige as well as the availability of various social resources, we expect the parents' occupation to be linked to network resources as well. As indicators for the parents' occupational prestige, two dummies constructed from the SIOPS were applied. These dummies differentiate between mothers (and fathers) inside and outside the upper quartile of the range of the mothers' (and the fathers') SIOPS in our sample. Control variables added to the models are displayed in Table 1.

This way, we will build a total of 2x2x2 = 8 linear models and 2 logistic re-

Table 1. Control variables in the models estimated

Name of variable	Description	Coding	Comment
Application ratio	Proxy for institutional quality. Measured as the ratio of the total number of applicants to the number of successful applicants in the higher education institution for the particular field of study they covered. The higher this ratio, the higher the quality of the institution is considered to be.	Continuous	
Type of institution	Type of higher education institution.	1=University 0=College	
Field of study	Field of study: agriculture, foreign language, teacher training, sports, IT, engineering, medicine, law, economics+business, social sciences, natural sciences	Reference category: arts and humanities	
Financing	Studies not fully financed by the state for any reason	1=not fully financed by the state; 0=state-financed	
Work experience	In-school labour-market experience	1=worked regularly while in tertiary education; 0= did not work	
Unemployment ratio	Micro-regional unemployment rates in 2000 and 2002	Continuous	
Place of work	Working in Budapest	1=working in Budapest; 0=working elsewhere	
Further study	Type of formal education completed after graduation: separate dummies for: university, college, PhD, other higher education institution, any other type of further study	1=studied; 0=did not study	Not included in the 2000 models.
Unemployment experience	(Lack of) labour market experience: whether the respondent had spent any time unemployed between graduation in 1999 and January 2004	1=was unemployed; 0=was not unemployed	Not included in the 2000 models and the unemployment estimations
Time spent not working	Whether the respondent spent any time not working for any reason, other than studying or being unemployed	1=spent time not working; 0=did not spend time not working	Not included in the 2000 models

gression models. First, a set of linear models will be estimated: one with a measure of social prestige as the dependent variable and another one with monthly net earnings as the dependent variable. Both sets will be produced for both waves of the survey, and for men and women separately. Then two logistic regression models will be added to the binary outcome, whether the respondent spent any time unemployed between September 1999 and January 2004. Here again, separate models for men and women will be estimated.

In the following section, the problems of selectivity and endogeneity will be considered and – where possible – dealt with.

Selectivity and endogeneity in the data

Potentially the most serious source of bias is the low rate of return in the first wave of this survey and the high attrition rate in the second one. It is estimated that in 1999 around 27 000 graduates left the higher education system in Hungary. The return rate was 22% in the first wave, resulting in a sample size of 5808. This number was then further reduced in the second wave, when only 2242 respondents, the ones who willingly provided a phone number in the first survey (and still valid four years later), could be contacted. Although definitely low, such levels of response rate are not unusual for social surveys of this kind. In any case, we found that the size of the resulting sample was sufficient for performing the type of analyses presented here. However, since the distribution by the type of higher education institutions in the sample was different from that in the overall population, we applied analytical weights in the study. The aim of weighting was to reproduce in the sample the proportion of students that graduated from the various higher education institutions in 1999. In this way, distribution by type of institution, by region of higher education, and by field of study was adequately adjusted to the relevant distribution in the entire population.

Although we could not control for selectivity in the first wave, we examined the possibility that the more successful individuals – i.e. those with a more stable labour market position, better career prospects, and higher wages – were more willing to provide their phone numbers for a second survey. If this is true, we are missing out on input from those who are less successful, and we can therefore expect the key parameters of the social background variables to be underestimated in our models. Unfortunately, a fully satisfactory control of the selection process is not possible based on the data at hand, because the key measures of the individuals' social background were only included in the second survey, where the number of respondents had already been reduced. The possibilities open to us are therefore limited. Below we will compare the 'responding' and the 'non-responding' sub-groups in our sample along the key schooling and labour market indicators. Then we will attempt to draw some conclusions regarding the possible biases that necessarily remain in our estimates.

The similarity of the 'first-wave-only' and the 'both-waves' sub-samples could only be tested on the attributes included in the first survey. The distributions and the means of the two sub-samples by gender, labour market position at the time of the first survey, field of study, type of higher education, occurrence of work while at higher education, and satisfaction with work in 2000[7] suggest that selectivity is gender dependent. First, men were somewhat more likely to respond to the second survey than women – with 48% of men and 45% of the women in the original sample participating in the 2004 sample.[8] The characteristics of the women who responded to the second survey do not significantly differ from those who participated in the second wave only (including labour market status in September 2000, field of study, type of higher education institution, work experience, and wages and social prestige in 2000). Among men, however, those included in both samples show some distinct features. They were more likely to be in the labour force in September 2000 (either working or as unemployed) and less likely to be studying than the others. Besides, those who were studying did so at a college rather than a university. Agriculture students and those who did not work during their higher education studies were overrepresented in the second set. Even though the men who responded to both surveys appeared to be earning less in 2000 than the others, further investigation revealed that this difference is largely attributable to college graduates being overrepresented in the second group.

To assess the joint effect of the key variables on response in the second wave, we estimated simple binary models with the variables mentioned above on the right-hand side. Results from probit estimation show that in the case of men the type of institution has a significant effect on the participation in the second wave. University graduates are less likely to participate than college graduates. Interestingly, those who were already working at the time of their tertiary studies were less likely to participate than others. Among women, social science graduates are more willing to participate than others – an understandable finding that likely reflects their interest in, and empathy for, social science research. Finally, agriculture graduates seem to be slightly overrepresented in the 'both waves' group.

In general, our estimations suggest no marked selectivity along the indicators applied in this study. Pseudo R^2 is only slightly above 1% in the model for men and is even lower in the estimation for women. This suggests that selectivity on observable characteristics in the second survey is not especially a problem in these data.

Another driver of selectivity is the unobservable 'labour market success'. This is the case of classical self-selection into employment, and thus the usual argument applies: we can expect our estimated coefficients to be biased because of the systematic differences in wage offers and observed wages between those who work and those who choose not to. However, to correct such an effect we

[7] For statistics in this section see Blaskó and Róbert [2007].

[8] Compared to the entire population of graduates in 1999, women still remain overrepresented in this sample. This is due to their higher response rate in the first survey.

would need to find a suitable instrument that correlates with participation and does not correlate with wage – a criterion that none of our variables in the data set seems to meet. We must consequently hope that the biases due to selectivity are not too severe here. This hope is supported by the relatively low percentage of unemployed and inactive in the sample (6.4% and 5.2% respectively in 2000, and 2.7% and 13.9% in 2004 – excluding full-time students).

The economic literature on returns to education discusses in detail how the unobserved characteristics of individuals (such as family background, school quality, and ability) can lead to biases when return to schooling is estimated by OLS. The direction of this bias depends on the nature of the relationship between the variables omitted on the one hand and the level of schooling on the other [e.g. Galasi 2003]. In the case at hand it is the parameters of the family background measures that may suffer owing to the endogeneity of school quality and ability. This problem is partly handled by applying proxies in the analysis. To assess the impact of school quality, we estimate the premia for a university (as opposed to a college) degree, and for certain fields of studies. Furthermore, the ratio of the total number of applicants to successful applicants to an institution and field of study combination (i.e. a particular field in a particular institute) is applied as a proxy for institutional heterogeneity. It is assumed that in the environment of an increasing labour supply, employers use information on institutional heterogeneity as an additional screening device.

When modelling choice of schooling, we may believe that family background, as well as individual ability, is an important determinant of the type of higher education. Because of this, there is a correlation between individual ability and schooling choice, which is conditional on family background. To isolate the effect of family background on wages, we have to rid it of individual ability effects. This could be achieved by including a good proxy for ability in the regression (such as appropriate test scores), but such scores are unfortunately not available in these data[9].

Models, analyses, and findings

Table 2 displays the final linear regression models for men and women respectively. In both cases, four models are shown. Two have (log) wages and (log) SIOPS as outcome, two relate to 2000, and another two to 2004. Table 3, in turn, presents odds ratios and z values from the logistic regression models on the odds of unemployment.

Our estimates indicate that key factors associated with early success in the labour market are the type of higher education institution (with university degrees providing better opportunities than college degrees) and the field of study

[9] Although one could consider data on the application ratio – our proxy for institutional heterogeneity – to incorporate some aspects of individual ability as well.

Table 2. Coefficients from OLS estimations (t-values in parentheses)

	Men				Women			
	Log earnings, 2000	Log SIOPS, 2000	Log earnings, 2004	Log SIOPS, 2004	Log earnings, 2000	Log SIOPS, 2000	Log earnings, 2004	Log SIOPS, 2004
High prestige father	0.029	0.000	0.116	–0.013	–0.059	–0.003	–0.058	0.001
	(0.41)	(0.02)	(2.09)**	(0.79)	(1.46)	(0.17)	(1.51)	(0.05)
High prestige mother	–0.015	0.012	–0.013	0.017	0.016	–0.003	–0.016	0.007
	(0.19)	(0.48)	(0.20)	(0.86)	(0.39)	(0.14)	(0.39)	(0.38)
Father: higher education	–0.105	0.027	–0.061	0.039	0.093	0.019	0.057	–0.011
	(1.48)	(1.13)	(1.07)	(2.17)**	(2.26)**	(1.09)	(1.46)	(0.61)
Mother: higher education	–0.044	–0.033	–0.074	–0.027	–0.014	0.036	0.028	–0.005
	(0.59)	(1.35)	(1.14)	(1.37)	(0.32)	(1.92)*	(0.70)	(0.24)
Application ratio	0.010	–0.001	0.005	0.001	0.001	0.004	–0.002	0.007
	(0.69)	(0.22)	(0.41)	(0.18)	(0.15)	(1.41)	(0.26)	(2.58)**
University	0.181	0.033	0.180	0.024	0.162	0.055	0.104	0.054
	(3.11)***	(1.66) *	(3.58)***	(1.51)	(4.79)***	(3.73)***	(3.09)***	(3.39)***
Self–financed studies	0.012	0.034	–0.046	0.027	–0.084	0.005	–0.061	0.012
	(0.16)	(1.39)	(0.73)	(1.33)	(2.26)**	(0.28)	(1.60)	(0.67)
Working in Budapest	0.105	0.048	0.101	0.013	0.130	–0.007	0.135	–0.011
	(1.88)*	(2.52)**	(2.14)**	(0.86)	(3.88)***	(0.47)	(4.22)***	(0.72)
Agriculture	0.315	–0.073	0.197	–0.087	0.272	–0.138	0.310	–0.083
	(2.36)**	(1.65)*	(1.89)*	(2.70)***	(4.38)***	(5.14)***	(5.06)***	(2.96)***
Foreign language	0.205	0.045	0.255	0.025	0.103	–0.065	–0.012	–0.052
	(0.98)	(0.68)	(1.29)	(0.39)	(1.78)*	(2.57)**	(0.21)	(2.00)**

Teacher training	–0.069	0.026	0.138	0.036	–0.008	–0.017	0.002	–0.044
	(0.33)	(0.37)	(0.81)	(0.68)	(0.15)	(0.78)	(0.04)	(1.87)*
Sports	–0.070	0.020	0.006	0.063	–0.304	–0.041	–0.019	–0.105
	(0.24)	(0.20)	(0.02)	(0.89)	(1.29)	(0.40)	(0.10)	(1.18)
Informatics (IT)	0.570	–0.001	0.262	–0.037	0.613	–0.000	0.347	–0.086
	(3.95)***	(0.03)	(2.22)**	(1.00)	(6.15)***	(0.01)	(3.54)***	(1.78)*
Engineering	0.437	0.069	0.289	–0.015	0.318	0.002	0.156	–0.047
	(3.70)***	(1.79)	(2.98)***	(0.51)	(5.11)***	(0.06)	(2.50)**	(1.55)
Medicine	–0.059	0.204	0.324	0.209	0.016	0.075	0.063	0.166
	(0.39)	(3.99)***	(2.49)**	(5.13)***	(0.26)	(2.87)***	(1.05)	(5.89)***
Law	0.303	0.079	0.255	0.135	0.067	–0.063	0.236	–0.098
	(1.90)*	(1.49)	(1.82)	(3.07)***	(0.90)	(1.97)**	(3.05)***	(2.75)***
Economics / business studies	0.675	–0.037	0.388	–0.034	0.582	–0.067	0.505	–0.071
	(5.50)***	(0.91)	(3.84)***	(1.10)	(11.52)***	(3.09)***	(10.26)***	(3.09)***
Social sciences	–0.120	–0.050	0.112	–0.055	0.135	–0.035	0.083	–0.071
	(0.45)	(0.56)	(0.47)	(0.71)	(1.64)	(0.99)	(0.97)	(1.76)*
Natural sciences	0.028	0.024	–0.056	0.042	–0.027	0.023	0.146	0.020
	(0.19)	(0.46)	(0.49)	(1.16)	(0.40)	(0.77)	(2.43)**	(0.71)
Work experience	0.137	–0.018	0.000	0.021	0.116	–0.008	0.059	0.005
	(2.50)**	(0.94)	(0.00)	(1.38)	(3.59)***	(0.61)	(1.83)*	(0.35)
Regional unemployment ratio 2000	–0.445	–0.074			–1.341	0.234		
	(0.56)	(0.27)			(3.22)***	(1.28)		
Regional unemployment ratio 2002			–0.346	0.112			0.138	0.063
			(0.52)	(0.54)			(0.32)	(0.32)

Table 2 (cont'd) Coefficients from OLS estimations (t-values in parentheses)

	Men				Women			
	Log earnings, 2000	Log SIOPS, 2000	Log earnings, 2004	Log SIOPS, 2004	Log earnings, 2000	Log SIOPS, 2000	Log earnings, 2004	Log SIOPS, 2004
Further study – University			–0.049	0.041			0.038	0.015
			(0.86)	(2.27)**			(1.13)	(0.99)
Further study – College			0.025	0.025			0.055	–0.003
			(0.45)	(1.41)			(1.45)	(0.15)
Further study – PhD			–0.071	0.027			–0.114	0.145
			(0.52)	(0.62)			(1.12)	(2.96)***
Further study – other higher education			–0.019	0.046			–0.086	–0.043
			(0.17)	(1.32)			(1.45)	(1.57)
Further study – outside the higher education			–0.046	–0.036			–0.032	–0.007
			(0.96)	(2.38)**			(0.94)	(0.47)
Unemployment experience			–0.103	0.004			–0.126	–0.062
			(1.79)*	(0.19)			(3.33)***	(3.47)***
Not employed for a while			0.087	–0.000			–0.055	–0.026
			(1.15)	(0.01)			(1.51)	(1.51)
Constant	10.587	3.975	11.372	3.950	10.580	3.973	11.261	4.004
	(70.80)***	(79.70)***	(90.97)***	(102.88)***	(178.78)***	(156.68)***	(188.23)***	(143.94)***
Observations	410	410	436	474	702	712	621	656
R–squared	0.23	0.17	0.18	0.24	0.40	0.14	0.32	0.24

Absolute value of t statistics in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 3. Logistic regression on risk of unemployment between graduation and January 2004. Odds ratios (Robust z statistics in parentheses)

	Men	Women
High prestige father	0.599 (1.50)	0.721 (1.24)
High prestige mother	0.743 (0.75)	0.598 (1.66)*
Father: higher education	0.803 (0.63)	1.082 (0.30)
Mother: higher education	1.234 (0.51)	1.450 (1.17)
Application ratio	0.898 (1.17)	0.99 (0.13)
University	0.779 (0.81)	0.742 (1.18)
Self-financed studies	1.818 (1.80)*	0.949 (0.18)
Agriculture	0.948 (0.10)	1.498 (1.18)
Foreign language	0.252 (1.15)	0.479 (1.84)*
Teacher training	1.677 (0.72)	0.655 (1.29)
Sports	0.477 (0.65)	1.494 (0.34)
Informatics (IT)	0.143 (2.73)***	0.906 (0.12)
Engineering	0.361 (1.98)**	0.345 (2.19)**
Medicine	0.101 (2.12)**	0.044 (3.03)***
Law	0.231 (2.40)**	0.428 (1.57)
Economics / business studies	0.590 (0.59)	0.563 (1.67)*
Natural Sciences	1.018 (0.03)	0.397 (2.03)**
Work experience	0.356 (2.87)***	0.640 (1.71)*
Regional unemployment ratio 2002	6.934 (0.50)	3.379 (0.46)
Further study – university	0.668 (1.23)	0.960 (0.16)
Further study – college	0.442 (2.29)**	1.310 (1.05)
Further study – PhD	0.234 (1.42)	0.616 (0.51)
Further study – other higher education	0.606 (0.62)	1.040 (0.08)
Further study – not in higher education	0.919 (0.30)	1.832 (2.77)***
Not employed for a while	0.557 (0.83)	0.701 (1.59)
Observations	519	892

Robust z statistics in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

(with some outstanding areas such as information technology, engineering, medicine, business, and economics). Further advantages can be achieved through work experience. In addition, those who find jobs in Budapest also seem to be better off than others. We found that institutional heterogeneity – as measured by the application ratio – only affects the social prestige of women five years after graduation. Consequently, institutional differences do not appear to serve as a significant screening device in the graduate labour market.

To these main determinants of a graduate's employment outcome must be added family background, although it operates at varying degrees, in different ways, and in various circumstances. Among men in a very early stage of their graduate career, neither the social prestige of their job nor their wage is influenced directly by parental background. Three and a half years later, however, the social standing of the parents begins to have a statistically significant effect on both of them (at the 0.05 level). By that time, those whose fathers rank in the top quartile of the occupational prestige scale earn 12% more than their counterparts, while men whose fathers also completed higher education enjoy 4% more social prestige than others. The likelihood of socially advantaged men becoming unemployed during these early years is not significantly lower than the average.

The parameters in the case of women show a different pattern than in the case of men, confirming our decision to estimate separate models for each genders. Remarkably, social background variables behave differently here, although they indicate important similarities, too. Most notably, the timing of parental impact shows an opposite picture here, with the wage and social prestige of graduates being influenced by social origin in 2000 but not later. In 2000, advantages associated with a good social background included a 9% wage premium (associated with a graduate father) and 4% higher social prestige (associated with a graduate mother). By 2004 however, all direct parental impact are diminishing. Instead, we found that graduate women with a high prestige mother are 40% less likely to be unemployed during the first years of their careers than those from less advantageous social backgrounds. (Table 3)

Discussion

In this analysis, we focused on the early stages of a graduate's career. Graduates' jobs 15-16 months after graduation (September 2000) tend to be their first jobs after completing their degrees (76% of the cases in this sample). Even the 2004 data provide us with still a rather early view of their life course. It is difficult to tell whether the parental impact detected at this time would be smaller or greater than what we would measure at a later time. A related question is how the different findings from the 2000 and 2004 models can be interpreted.

Social mobility studies usually assume that a graduate's earlier jobs are more strongly influenced by parental background than later jobs. This is not nec-

essarily true for the very first jobs though. It is expected that in the early phases of a graduate's career, there are more arbitrary determinants behind what jobs they take, and the job-person match usually improves during the process of intragenerational mobility [Mayer and Carroll 1987]. These tendencies are likely to strengthen owing to recent changes in the school-to-work transition process, as nowadays school leaving is followed by a longer searching phase, during which a graduate typically holds a series of unstable jobs with fixed-term contracts [Müller and Gangl 2003]. In this sense, early snapshots of a graduate's career provide a somewhat arbitrary picture, which is not yet 'mature' enough in the sense of its providing a reliable reflection of the graduate's preferences, capabilities, and long-term career prospects. Consequently, we should expect that the effect of social background would change and increase over time as a graduate ages and see a status-correction, whereby the individuals social position is adjusted to match their social background [e.g. Breen and Goldthorpe 2001].

However, the ageing effect cannot be identified separately from cohort effects here. As mentioned above, the graduate labour market has changed radically over the past fifteen years in Hungary. A dramatic increase in the supply of graduates was met by an equal demand until around 2000–2002, but less so after that. With the number of applicants growing, one would expect employers to make more extensive use of alternative selection criteria, some of which could reflect social background, which would then lead to an increase in direct parental effects. By the time of the second data collection in 2004, these tendencies started showing up in the labour market, and – according to our hypothesis – they could result in an increase in the direct impact of social background.

It is impossible using the available data to disentangle the potential effects. To do so we would need different cohorts observed over time. The difference between our two observations is not only that the individuals are older, but also that they are operating in a potentially very different economic environment. Given that the two processes (i.e. the aging effect and the passage of historical time) are inseparable, we can never be quite sure what causes the changes we see. All in all, the increasing tendency for parental background to have an impact on wages, as well as on social prestige, in the case of men seems to be in line with both the aging effect and the cohort effect described. Further research is needed to find out whether the strength of this effect will increase as graduate men move on in their career or stabilise on the 2004 level.

However, what we found in the case of women – significant parental impact in 2000 only – does not justify these expectations. A possible explanation is that it is the gender-specific nature of the early working career that overrides the general ageing and cohort effects. After finishing higher education, women are more likely to feel the pressure to make a quick and efficient career-start before leaving work, for a shorter or longer period, to become mothers. On the basis of recent demographic trends in Hungary, around 10% of women with a higher education degree may be expected to give birth before turning twenty-five and with a fur-

ther 40% doing so before their thirtieth birthday.[10] By 2004, 5% of the women in our sample working at the time of the second survey had already had some break in their career. The length of this break was more than two years on average. Furthermore, over 20% of the women working in 2000 were on maternity leave in 2004, and therefore they were missing from our second set of models. Expecting an early break in their career, women are possibly less affected by the tendency for career starts to be flexible and make more of an effort to find the right position as soon as they can. These substantial deviations from the classic career route of steady adjustments and upward movements, along with the large number of women missing from the second sample of working graduates, may explain why there was no sign of the expected ageing effect in the case of women.

Turning now to the issue of the source of parental impact, there are other important gender characteristics in the social reproduction process that can be explored. In support of earlier research findings that the mother's characteristics are more important in shaping their daughters' careers and the fathers have more of an impact on their sons' status attainment [e.g. Aschaffenburg 1995], we also found that mothers play a greater role in the case of women. In particular, our models show that it is the highest level of education of the women's mothers that influences women's social prestige, while their risk of unemployment is a factor of their mothers' social prestige. Out of the three success measures investigated, it is only women's earnings that seem to be influenced more by their fathers' characteristics. On the other hand, in the case of men, both wage and social prestige score are factors of the fathers' characteristics – a finding that is very likely to reflect the gendered nature of socialisation in the family and the gendered nature of the occupational structure.

Out of the indicators for social background applied in this study, parents' education is more closely linked to the cultural atmosphere of the family. Therefore, we could risk the conclusion that the significant parameters associated with either parent's higher education degree suggest cultural ways of transmitting inequalities are present. As explained earlier, parents' occupational status is generally assumed to be linked to the financial situation of the family, but also to its general social standing, social network, and power.

From this it follows that, with both earnings and the occupational prestige score of women being factors of either parent's education, it is mostly through socially inherited abilities, skills, attitudes, and behaviour that family background affects the quality of jobs taken by graduate women. In other words, it is the cultural inheritance that a woman can mobilise to get a good position in the labour market. The odds of finding a job at all, on the other hand, seem to depend more on the financial and network resources of the family. This can be seen from the model estimating the risk of women's unemployment. In this model, only the mother's occupation showed a significant positive effect.

[10] Authors' estimations based on Spéder [2006].

In the case of men, out of the two significant impacts found, one was generated by (the father's) education and the other by (the father's) occupational prestige. Since the (notably) stronger effect was associated with the father's occupation (12% higher wage in 2004) we suggest that, for men, the social and financial resources of the family are more significant than cultural factors. These are only vague hypotheses at this stage. To understand the underlying mechanisms in detail, more focused research with specific proxies for the cultural, social, and even material resources of the family would be needed.

Finally, we turn to the comparison of our two proxies of employment success: the wage and social prestige of the occupation. The substantial difference in the amount of parental impact on these two proxies supports our approach of investigating more than just one aspect of social and labour market status. With SIOPS as a proxy for the quality of positions achieved, the impact of social background appears to be much more moderate, the premia for coming from a 'good' family not exceeding 4%. This is opposed to an increase of 9–12% when wages are applied. These results imply that researchers of social mobility concentrating on occupational prestige measures and not paying attention to wages can easily underestimate the importance of some potentially serious sources of social inequalities. In fact, our findings appear to be in line with the picture emerging from a non-systematic overview of the related sociological and economic literature. To us, it seems to suggest that economists (and sometimes sociologists) looking at earnings rather than other measures of occupation/social position seem are more likely to explore the direct background effect in their studies than sociologists are. Of course, a systematic meta-analysis on the relevant literature would be needed to find out whether earnings are indeed more directly influenced by social origin than social prestige.

All these comments and results depend, of course, on the population studied and the measures applied here, although our statistical models to some extent meet the requirements of robustness. We experimented with different combinations of measures for social background and various ways of dichotomising, for example, the father's SIOPS, and our key findings did not seem to be dependent on these exercises.

Conclusion

This article has shown that social background continues to affect labour market opportunities after completing higher education in contemporary Hungary. Besides studying at a university (rather than at a college) and picking the 'right' subject, coming from a 'good' family can provide further advantages when it comes to finding a good job, or (in the case of women) even to finding a job at all. Our analysis has revealed various gender-specific elements of this phenomenon. We have shown that, for women, the influence of social background appears soon

after graduation but diminishes a few years later. For men, the tendency is just the opposite: direct social impact on their labour market success only shows up some years after completing their studies. We attributed this difference to family engagements, which can significantly divert women's careers when they are in their twenties. However, based on these data, we cannot tell whether the relatively strong job-person match – as measured by the match between social origin and the position achieved – soon after graduation in the case of women is again achieved as women start stabilising their position in the labour market after giving birth.

Further contributions of this study are the parallel and fully comparable estimates of wages on the one hand and occupational prestige scores on the other. Between the two, a systematic difference in the amount of parental impact was found, with wages having a notably stronger association with the occupation or education of the parents. On the basis of this finding, we have suggested that the common use of social prestige scores in the social mobility literature could possibly contribute to sociologists somewhat neglecting the issue of direct impact of social origin.

This study is based on a survey that was not originally designed for an in-depth exploration of the social process of status-transmission. Consequently, not all of our research questions could satisfactorily be answered here. It would be a major improvement to this analysis if we had a reliable estimate of ability to allow us to control for potential ability bias. Also, a better targeted survey would ideally include a carefully selected range of questions to assess cultural, social, and financial resources available in the parental house. Methods of job search and direct parental assistance at the stage of labour market entry should also be explored to provide better insight into the actual process of social inheritance.

An in-depth understanding of the underlying factors is necessary, not only for the sake of academic understanding, but also for developing efficient policy measures. At this stage already, one important message does stand out for everyone interested in social equality. By showing that social reproduction is taking place not only inside but also outside the education system, we can conclude that working towards equal opportunities within the education system, and even achieving a generally high rate of higher education attainment, may not in itself be sufficient to secure equal opportunities in the labour market.

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References

Altonji, J. G. and A. D. Thomas. 1995. 'The Effects of School and Family Characteristics on the Return to Education.' NBER Working Paper No. 5072, Cambridge, MA: NBER.

Aschaffenburg, K. E. 1995. 'Rethinking Images of the Mobility Regime: Making a Case for Women's Mobility.' *Research in Social Stratification and Mobility* 14: 201–235.

Ashenfelter, O. and D. Zimmerman. 1997. 'Estimates of the Return to Schooling from Sibling Data: Fathers, Sons and Brothers.' *Review of Economics and Statistics* 79: 1–9.

Blaskó, Z. 2002a. 'Pályakezdő diplomások a munkapiacon. Egy nemzetközi összehasonlító vizsgálat néhány tanulsága.' (Young Graduates in the Labour Market. Some Lessons to be Learned from an International Study) *Educatio* 2: 301–312.

Blaskó, Z. 2002b. 'Access to What? How to Convert Educational Opportunity into Employment Opportunity for Groups from Disadvantaged Backgrounds.' Retrieved 9 July 2007 (http://www.Hefce.ac.uk/pubs/rdreports/2002/rd14_02).

Blaskó, Z. 2003. 'Cultural Capital and Social Reproduction.' *Review of Sociology of the Hungarian Sociological Association* 9 (1): 5–26.

Blaskó, Z. and P. Róbert. 2007. 'Social Background Effects in the Hungarian Graduate Labour Market.' Working Paper Series at the Demographic Research Institute, Budapest – forthcoming. Budapest: Demografphic Research Institute.

Blau, P. M. and O. D. Duncan. 1967. *The American Occupational Structure*. New York: John Wiley and Sons Inc.

Bourdieu, P. 1973. 'Cultural Reproduction and Social Reproduction.' Pp. 71–112 in *Knowledge, Education and Cultural Change*, edited by R. Brown. London: Willmer Brothers Limited.

Bowles, S. and H. Gintis. 2002. 'The Inheritance of Inequality.' *The Journal of Economic Perspectives* 16 (3): 3–30.

Breen, R. 1998. 'The Persistence of Class Origin Inequalities among School Leavers in the Republic of Ireland, 1984–1993.' *The British Journal of Sociology* 49 (2): 275–298.

Breen, R. and J. R. Goldthorpe. 1999. 'Class Inequality and Meritocracy: A Critique of Saunders and an Alternative Analysis.' *British Journal of Sociology* 50 (1): 1–27.

Breen, R. and J. R. Goldthorpe. 2001. 'Class, Mobility and Merit. The Experience of Two British Cohorts.' *European Sociological Review* 17 (2): 81–101.

Brennan, J., B. Johnston, B. Little, T. Shah and A. Woodley. 2001. *The Employment of UK Graduates: Comparisons with Europe and Japan*. London: Higher Education Funding Council for England.

Brown, P. and R. Scase. 1994. *Higher Education and Corporate Realities: Class Culture and the Decline of Graduate Careers*. London: UCL Press.

Bukodi, E. 2002. 'Társadalmi mobilitás Magyarországon 1983-2000.' (Social Mobility in Hungary 1983-2000). Pp. 193–206 in *Társadalmi Riport 2002*, edited by T. Kolosi, I. G. Toth and G. Vukovich. Budapest: TÁRKI.

Card, D. 1998. 'The Causal Effect of Education on Earnings.' Working Paper No. 2. 1998. Berkeley: Center for Labor Economics, University of California.

Diploma. 2006. HVG Különszám (*Higher Education Degree 2006*). Budapest: HVG.

Evans, M. D. R., J. Kelley, J. Sikora and D. J. Treiman. 2005. 'To the Scholars Go the Spoils? The Influence of Parents' Scholarly Culture on Offspring's Occupational Attainment in 31 Societies.' Retrieved 9 June 2007 (http://www.ccpr.ucla.edu/isarc28/Final%20Papers/Scholar%20go%20Spoils_EvansKelly.pdf).
Fazekas, K. and J. Varga. (eds.) 2005. *The Hungarian Labour Market 2005.* Budapest: Institute of Economics, Hungarian Academy of Sciences.
Galasi, P. 2003. 'Estimating Wage Equations for Hungarian Higher-Education Graduates.' Budapest Working Papers in the Labour Market BWB. 2003/4. Budapest: Labour Research Department, Institute of Economics, Hungarian Academy of Sciences and Department of Human Resources, Budapest University of Economics and Public Administration.
Galasi, P. 2004a. 'Túlképzés, alulképzés és bérhozam a magyar munkaerőpiacon 1994–2002.' (Overeducation, Undereducation and Wage Premia on the Hungarian Labour Market, 1994-2002) Budapesti Munkagazdaságtani Füzetek, 3. szám. Budapest: MTA KTK és BKÁE.
Galasi, P. 2004b. 'Valóban leértékelődtek a felsőfokú diplomák?' (Have Higher-Education Diplomas Been Devalued? Skill Biased Technical Change and the Reallocation of College) Budapesti Munkagazdaságtani Füzetek, 4. szám. Budapest: MTA KTK és BKÁE
Ganzeboom, H. B. G. and D. J. Treiman. 1996. 'Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations.' *Social Science Research* 25: 201–239.
Goldthorpe, J. H. 1985. 'On Economic Development and Social Mobility.' *The British Journal of Sociology* 36 (4): 549–573.
Goldthorpe, J. H. and M. Jackson. 2006. 'Education Based Meritocracy: The Barriers to Its Realization.' Paper Presented on the Russel Sage Foundation Conference on Social Class, New York, 21–22 April 2006.
Grubb, W. N. 1993. 'The Varied Economic Returns to Postsecondary Education: New Evidence from the Class 1972.' *The Journal of Human Resources* 28 (2): 365–382.
Hauser, R. M. and T. M. Daymont. 1977. 'Schooling, Ability and Earnings: Cross-Sectional Findings 7 to 14 Years after High School Graduation.' *Sociology of Education* 50 (3): 182–206.
Hout, M. 1988. 'More Universalism, Less Structural Mobility: The American Occupational Structure in the 1980s.' *The American Journal of Sociology* 93 (6): 1358–1400.
Jackson, M., J. H. Goldthorpe and C. Mills. 2005. 'Education, Employers and Class Mobility.' *Research in Social Stratification and Mobility* 23: 1–30.
Kugler, A. D. 1997. 'Employee Referrals and the Inter-Industry Wage Structure.' Economics Working Paper 252. Department of Economics, Universitat Pompeu Fabra.
Lam, D. and R. F. Schoeni. 1993. 'Effects of Family Background on Earnings and Returns to Schooling: Evidence from Brazil.' *The Journal of Political Economy* 101 (4): 710–740.
Leibowitz, A. 1974. 'Home Investments in Children.' *Journal of Political Economy* 82 (2): S111–S131.
Mason, G. 1996. 'Graduate Utilisation in British Industry: The Initial Impact of Mass Higher Education.' *National Institute Economic Review* 156: 93–103.
Mayer, K. U. and G. R. Carroll. 1987. 'Job and Classes: Structural Constraints on Career Mobility.' *European Sociological Review* 3 (1): 14–38.
Mincer, J. 1974. *School, Experience and Earnings.* New York: Columbia University Press.
Morgan, S. L. 2006. 'Past Themes and Future Prospects for Research on Social and Economic Mobility.' Pp. 3–20 in *Mobility and Inequality: Frontiers of Research from*

Sociology and Economics, edited by S. L. Morgan, D. B. Grusky and G. S. Fields. Stanford: Stanford University Press.
Müller, W. and M. Gangl. (eds.) 2003. *Transition from Education to Work in Europe*. Oxford: Oxford University Press.
Naylor, R., J. Smith and A. McKnight. 2002. 'Sheer Class? The Extent and Sources of Variation in the UK Graduate Earnings Premium.' CASE Paper 54. Centre for Analysis of Social Exclusion. London: LSE.
Róbert, P. 1991. 'The Role of Cultural and Material Resources in the Status Attainment Process: The Case of Hungary'. Pp. 145–171 in *Beyond The Great Transformation Research Review on the Hungarian Social Sciences*. Granted by the Government, edited by A. Tóth and L. Gábor. Budapest: Coordinating Council of Program TS-3.
Róbert, P. 2004. 'Felsőoktatás és Munkaerőpiac.' (Higher Education and Labour Market) IFM Humán Erőforrás Háttértanulmányok. Budapest: TÁRKI.
Róbert, P. and E. Bukodi. 2004. 'Changes in Intergenerational Class Mobility in Hungary, 1973–2000.' Pp. 287–314 in *Social Mobility in Europe*, edited by Richard Breen. Oxford: Oxford University Press.
Rosen, S. 1977. 'Human Capital: A Survey of Empirical Research.' *Research in Labor Economics* 1: 3–40.
Rosenbaum, J. E., T. Kariya, R. Settersen and T. Maier. 1990. 'Market and Network Theories of the Transition from High School to Work: Their Application to Industrialized Societies.' *Annual Review of Sociology* 16: 263–299.
Shavit, Y. and H-P. Blossfeld. (eds.) 1993. *Persistent Inequality. Changing Educational Attainment in Thirteen Counties*. Bouldertabet: Westview Press.
Smith, J., A. McKnight and R. Naylor. 2000. 'Graduate Employability: Policy and Performance in Higher Education in the UK.' *Economic Journal* 110: F382–F411.
Spéder, Z. 2006. 'Rudiments of Recent Fertility Decline in Hungary: Postponement, Educational Differences, and Outcomes of Changing Partnership Forms.' *Demographic Research* 15 (8): 253–288. Retrieved 28 November 2007 (http://www.demographic-research.org/volumes/vol15/8/).
Taber, C. R. 2001. 'The Rising College Premium in the Eighties: Return to College or Return to Unobserved Ability?' *The Review of Economic Studies* 68 (3): 665–691.
Teichler, U. 2000. 'Graduate Employment and Work in Selected European Countries.' *European Journal of Education* 35 (2): 141–157.
Treiman, D. J. 1970. 'Industrialisation and Social Stratification.' Pp. 207–234 in *Social Stratification: Research and Theory for the 1970s*, edited by E. O. Laumann. Indianapolis: Bobbs-Merrill.
Treiman, D. J. 1977. *Occupational Prestige in Comparative Perspective*. New York: Academic Press.

Believer Perspectives on Death and Funeral Practices in a Non-believing Country*

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Abstract: The article describes attitudes towards death and funeral rites in contemporary Czech society. It begins by revealing the attitudes to death held by the majority of the Czech population – non-believers. The customary secular funeral ceremony, held in a crematorium, is not entirely well suited to meeting the needs of the bereaved, and this is borne out by the fact that about one-third of all cremations are held without a funeral ceremony. The author argues that the current situation is not solely the result of the economic situation of individuals but also stems from the deeply rooted attitudes and values and the approach to religion of the Czech population. The second part of the article is devoted to the attitudes towards death and the funeral rite preferences of believers, based on a survey conducted with members of three religious groups: Roman Catholics, Protestants (Church of the Czech Brethren), and Jehovah's Witnesses. Finally, the author compares the attitudes of the secular majority and believers, and also outlines the connections between conditions today and under the former communist regime regarding the general approach to death and funeral rites.

Keywords: Czech Republic, death, last rites, funeral, believers
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Introduction

Funeral practices are always closely related to attitudes towards death and conceptions of the afterlife. Among the majority of the population in the Czech Republic, a country with a forty-year communist legacy, there are still deeply rooted taboos concerning death and issues relating to death. Many people try to avoid talking about death and dying, and consequently many people who have to cope with the death of a relative or a friend minimise the funeral ritual. In the com-

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munist era, the subject of death was regarded as taboo in the public domain, an approach similar to that of Western society on the whole for the better part of the 20th century. However, unlike in the West, where improper conditions for terminal patients in hospitals[1] led in the 1960s to a more open discussion on the subject of death and dying both in the academic and non-academic spheres, death remained taboo in Czech society right up to the end of the 20th century. Fortunately, the situation is now changing, people are very slowly becoming more open about how they deal with death and dying, and death is once again becoming an accepted part of life [Kalvach et al. 2004]. The modern hospice movement, led by Cicely Saunders in the 1960s in England, only began establishing itself in the Czech Republic in the mid-1990s.[2] There are currently (in 2007) fourteen hospices (two of them home hospices) in the country.

The majority of the Czech population claims to be atheist or to have no religious belief. The term 'atheist' has a special and broader meaning in the Czech context. It is often regarded as a term that expresses general opposition to members of an organised church, rather than a person who does not believe in the existence of God. The reasons for this lie primarily in the legacy of the various, often turbulent, historical events that led to the formation of the present-day Czech Republic (including secularisation and the communist regime) and to a strong aversion on the part of a large number of Czechs to organised religion [Nešpor 2004]. According to the 2001 census, only about 32% of Czechs claimed to belong to a church (84% of whom were Catholics), 59% declared themselves non-believers/atheists, and 9% did not answer the question on religious beliefs. Interestingly, many of those claiming to be non-believers/atheists do in fact hold some kind of personal beliefs, most often comprising a mixture of the occult, magical healing practices, eastern religious ideas, talismans, and various divination practices such as horoscopes, palm reading, etc. In a study based on data contained in the 1998 International Social Survey Programme, D. Hamplová concluded that Czech religiousness can be divided into two different groups: 'On the one hand, it is a belief in God embedded in the Christian doctrine; on the other it is an occult-based religious fatalism coupled with a spiritual orientation which might well be termed a belief in man.' [Hamplová 2000: 57–58]

[1] The hospital conditions for dying patients were no better in the Czech Republic, but it was unacceptable to focus too much attention on this issue since a good universal health service was seen as one of the great achievements of socialism; pointing out any inadequacies was felt to be politically and personally unwise.

[2] Marie Svatošová is credited with introducing the modern hospice movement to the Czech Republic.

Dealing with death in a secular majority

The existence of the communist regime in the former Czechoslovakia, with its overriding antireligious stance, was undoubtedly one of the reasons that the subject of death came to be so deeply hidden [see Nešporová 2007]. It was not advisable to talk about death, for which communist ideology offered no satisfactory explanation. Communist dogma, striving ceaselessly to eradicate religious ideas in any form, had little to offer the people for overcoming death, reducing their fear of death, or coping with bereavement. As Berger and Luckmann [1967] have pointed out, one of the most important tasks in any society is legitimating death. According to those authors, death obtains legitimacy through the existence of symbolic universes, which serve to explain and justify social reality. There is a strong need in every society to cope with death and to legitimise its place in society, since the awareness of death, a knowledge specific to humankind, and the fact of death, can underpin the meaning of society as a whole [Malinowski 1948]. Therefore, in most societies, death is a highly ritualised event, accompanied by certain rites that take place while a person is dying, and often more elaborate ones taking place after death. Last rites rank among the so-called rites of passage (together with birth, initiation and marriage [Gennep 1960]), which give structure to human life, and during which the new social stage that the key actors are in acquires social acceptance, secured from the collective character of the rites or their parts.

Communist doctrine was singularly unsuccessful in its attempts at legitimating death, claiming that it meant the end of human existence, and condemning the ideas of an afterlife and resurrection as fables. The system attempted to comfort people (the dying as well as the bereaved) by referring to lifetime achievements, particularly in terms of work. It was even felt that reconciliation with death would be achieved from an awareness that the results of a person's lifetime work would live on [Steindl 1987]; there was no promise of an afterlife as there is in most religious concepts. Perhaps not surprisingly, given that most people found the idea of reconciliation with death through work unappealing,[3] they tended to avoid thinking and talking about death completely. It has been suggested that such an attitude could have been reinforced by personal experiences of the Second World War [Jupp and Water 1999], and to some extent also by an attempt, in the public domain, not to draw attention to information concerning the mass murders committed by the communist regime in Russia. In short, death and dying was taboo. Notions of an afterlife were derided as the inventions of false religious doctrines.

However, the need for the ritualisation of liminal stages of life [Gennep 1960; Turner 1974] was reflected, and the communist regime introduced the concept of

[3] This was particularly relevant in a society where many people were not free to choose their work and for whom promoting the socialist ideal was in conflict with their personal convictions.

the secular funeral ceremony, based on the Russian antireligious model [see Merridale 2000: 336–7, 354–6], to replace the traditional religious ceremony. Although the secular funeral had never been particularly popular in Russia, where the Russian Orthodox Church was opposed to the practice of cremation and where more than 60% of the population demanded some kind of religious ritual [Merridale 2000: 336], it was widely accepted in Czech society during the forty years of communist rule. Archive data about the numbers of funerals conducted by the Roman Catholic Church in the mid-1950s and from 1967 to 1988 clearly show that citizens of the Czech Socialist Republic were gradually abandoning Catholic funeral ceremonies[4]. While Catholic funerals were held for about 75% of all deceased in 1955, over the next thirty-two years the figure decreased by nearly half, and Roman Catholic funerals were held only for 39% of the deceased in 1988 [Babička 2005: 478–480]. Consequently, most funeral ceremonies have been civil since 1980[5] and only in exceptional cases could the funeral be entirely omitted under the communist regime. In rural areas, especially in Moravia, the replacement of the religious funeral ceremony with a state civil ceremony was less successful than in towns [Navrátilová 1989: 154]. The situation in the Slovak Socialist Republic, the other half of the federation at that time, was very different owing to the much more widespread and stronger affiliation of Slovaks to Christian churches (mainly the Roman Catholic Church); therefore, funerals retained their Christian forms [Kandert 2005].

The civil ceremony was a drab event held in the hall of a crematorium or in a civic funeral hall, and included an impersonal speech briefly describing the deceased's life, their work and social contributions, and, when relevant, possibly also their Communist Party activities. The speech was accompanied by either live or recorded music. The widespread acceptance of this kind of funeral ceremony could be explained by the already existing atheistic social climate and the fact that Czechs were quite open to the idea of cremation. Unlike Orthodox Russians, many Czechs favoured cremation even before the communists came to power. The Czech Cremation Association was founded in 1909 and the first cremation took place in Liberec ten years later. Although Catholics did not recognise cremation as an alternative to burial until the 1960s, Protestant churches had no objection to this method of disposal. The Czechoslovak Church (since 1971, the Czechoslovak Hussite Church) even started to build columbaria in their chapels or cemeteries to hold the cremated remains. Nevertheless, the majority of people who favoured cremation were atheists.

[4] Catholic ceremonies were the norm until the middle of the 20th century. Funerals were quite elaborate, with wakes and funeral processions, in which many people took part, and mourning was also customised according to the relationship of the bereaved to the deceased; see Navrátilová [2004].

[5] No data are available on religious funeral ceremonies conducted by other churches, but it is clear from the small proportion of believers other than Roman Catholics in Czech society that the figures must be very low and represent only an insignificant proportion of all funeral ceremonies.

Today, the death rituals practised by the majority of Czechs could be seen as a reaction to the model introduced by the communist regime. It is not the cremation itself that is seen as inappropriate, but the civil ceremony held in the crematorium hall and especially the standard speech on the various contributions of the deceased. There is often an absence of any deeper meaning to it. According to information provided by the Czech Cremation Association, 78% of people who died in the Czech Republic in 2005 were cremated.[6] Standard secular funerals today are held in an atmosphere similar to that in the 1970s and 1980s. The speech is formal and usually given by a professional speaker provided by the crematorium, who has no personal relationship with either the deceased or the bereaved, to whom the speaker is introduced no more than a quarter of an hour before the funeral ceremony commences. The speaker talks about the deceased based on information provided by the bereaved, which is fitted into a 'template' or universal speech that usually lasts only about five minutes. The brevity of the funeral address is perhaps not surprising since a speech celebrating the working life and social contributions of the deceased may seem insincere when read by someone who had never met them, and since there is little point in talking of the future when there is no conception of an afterlife.

The author is convinced that this kind of ceremony does not correspond to the needs of the bereaved, and sees the inadequate ceremony, coupled with an aversion to organised religion and therefore also to its traditional rituals, as the main explanation for the significant decrease in the number of funeral ceremonies held. The contemporary secular funeral ceremony is not meaningful for some people [*cf.* Walter 1994], which is the reason why some relatives decide against holding a funeral ceremony. Funeral directors do not work with the emotions of the bereaved, and they do not provide their clients with much emotional support (the opposite is true in New Zealand, where secular funerals are also quite common; cf. Schäfer [2007]). There is no satisfactory solution for helping bereaved people to cope with the loss of a loved one or someone close to them; the old social and religious ways do not work any more and new ones have not yet established themselves. Bereavement organisations do not exist (with the exception of a few new organisations, often hospices, with very limited target groups). In difficult cases the bereaved can seek the help of a psychologist or psychiatrist, but this is not common [Kubíčková 2001].

Czechs themselves most often cite how expensive the ceremony is as an explanation for omitting it [Haškovcová 2000: 94], but that alone is an insufficient reason, as the prices (in proportion to wages)[7] are not significantly higher com-

[6] According to data from the Cremation Society of Great Britain, available at: http://www.srgw.demon.co.uk/CremSoc5/Stats/Interntl/2005/StatsIF.html. (Retrieved September 2007).

[7] The cost of a funeral with a ceremony (either cremation or burial) can range between 440 Euro (12 000 Czk) and 910 Euro (25 000 Czk), but it can cost much more when special quality and extra services are included. Cremation without a ceremony costs around 290

pared to other countries; rather the opposite is true. They also frequently argue that it is the emotional stress they are trying to avoid by omitting the funeral ceremony. They do not want to reawaken thoughts of the deceased, which inevitably happens during a funeral ceremony. This is not a very strong argument on its own, because it is hard to believe that they could forget the deceased just by avoiding a funeral ceremony, and in fact that is not what they want. But Czech society (like in Britain; see Walter [1999]) favours more reserved expressions of grief, and this choice enables them to avoid an emotionally stressful situation in the presence of others. It is a short step from holding a private ceremony for just a narrow circle of relatives (which Czechs often do nowadays) and omitting it altogether. When a ceremony is not seen as being somehow useful for the future existence of the deceased, for honouring the dead, or useful for the bereaved, then some bereaved decide to omit the funeral ceremony. Another reason that may warrant mention here is the anonymous nature of city life and the decline in mutual dependency which characterises traditional communities.

In approximately one-third of all Czech cremations no ceremony is organised through an undertaker, which, in most cases, means that no funeral ceremony is held.[8] A typical ceremony in a crematorium consists of listening to recorded music recommended by the management of the crematorium. The songs are chosen by the bereaved from a list provided by the funeral director, usually with some connection to the deceased. The bereaved can also bring their own CDs to be played during the ceremony if the music offered does not suit their taste. In the small crematorium hall at the Prague–Strašnice crematorium, the standard ceremony lasts a maximum of twenty-five minutes, only five minutes of which are usually devoted to the speech[9]; 28% of the funerals held there in 2004 consisted only of music without a speech [Maiello 2005]. In most cases the ashes are buried in a grave or deposited in a columbarium. Only a small number of cremations are followed by the scattering of the ashes.

Research amongst Czech believers

Qualitative research aimed at observing the attitudes of believers towards death and other related topics was conducted in Prague in 2003 and 2004. Three different religious groups belonging to three different churches were contacted in

Euro (8000 Czk). In 2006 average monthly earnings were 740 Euro (20 211 Czk). Moreover, a universal social benefit at a fixed amount of 180 Euro (5000 Czk) is provided by the state to the person who arranges the funeral (this is valid till the end of 2007).

[8] There are exceptions, especially amongst religious believers who prefer to organise the ceremony independently of an undertaker, sometimes without the presence of the body; for example, in the form of the Eucharist in the Catholic Church or a commemorative celebration in the Kingdom Hall of the Jehovah's Witnesses (see below).

[9] When a longer speech is planned, the family is asked to reserve double time.

the field research.[10] The sample contained one parish from each of the two main churches in the Czech Republic, the Roman Catholic Church and the Protestant Church of the Czech Brethren, and one smaller religious society that boasts a growing number of members and is currently the fourth largest religious group in the country, the Religious Society of Jehovah's Witnesses. The field research consisted mainly of semi-structured non-standardised interviews with believers, supplemented by participant and non-participant observation of each of the three religious groups, usually during religious services. In-depth interviews were conducted with the aim of discovering the attitudes of respondents in three main areas: first, ideas about death, dying, and the afterlife; second, attitudes towards suicide; and third, thoughts about funeral rites, their significance, and personal preferences. Below the author will focus on two of the above topics, namely, ideas about death and the afterlife, and funeral rites.

The interviewer asked as many general and open questions as possible, thereby leaving it to respondents to decide (either consciously or unconsciously) whether or not belonging to a specific religious group affected their opinions. Since the questions were related to death, which constitutes an important element in the doctrines of all the religious groups surveyed, membership of a religious group turned out to be of considerable importance in the respondents' answers. Respondents in each group usually shared similar ideas, especially in connection with the afterlife and the type of funeral preferred.

The research sample was created using purpose sampling, the basic criteria for the inclusion of an informant in the sample being active membership in one of the three selected religious groups, gender, and being between the ages of thirty and fifty. The mean age of the respondents was thirty-seven. The inclusion of any other criteria was accidental and depended primarily on the willingness of individual informants to give an interview on the subject of death. Informants were first contacted at their places of worship, usually after a service, and asked to take part in the research. The actual interview was then conducted at a time and place chosen by the respondent, most often at the place of worship or in a restaurant. Seven interviews were conducted for each of the three religious groups, one of which was with the leader of the respective congregation, i.e. a priest or elder, and three with male and three with female members of the group. A total of twenty-one interviews were conducted, recorded, transcribed, and analysed.

Roman Catholics

The research revealed that members of the Roman Catholic Church view death as a transition; as the end to earthly existence and at the same time as an inevitable

[10] In fact, a small non-Christian religious group was also researched, mostly for methodological reasons, but I do not refer to it in this paper. For more information see Nešporová [2004].

part of life. For Roman Catholics death is not the end but rather a turning point, after which, they are convinced, there is an afterlife. It was also found that most of those questioned believed that life is somehow pre-ordained and every human being has a pre-determined life span. Two respondents compared this process to a burning candle. In the words of Mr. L.:

> I believe that when you are born, a candle is lit. You receive a piece of paper containing a description of your main features, character, and the things you can influence; a certain degree of flexibility is possible, but your life is pre-ordained. The candle burns to its end; some will enjoy long lives, some short.

The above quote reveals an obvious belief in destiny and a pre-ordained life span and in the unchangeable nature of man. However, this belief in individual destiny is not strictly fatalistic in all areas of human existence. One informant suggested that there are domains that are not pre-determined as such, and where a person is the architect of his or her own fortune. However, a person's life span itself is not one of these areas, and the fact that man has no idea of the duration of his life is viewed as important.

Catholic views of the afterlife were found to be very positive; respondents most often referred to notions of the afterlife as a blessed existence and, moreover, one substantially better than a person's earthly tenure. For instance, Mr. L. continued: '... then [after death] I will be fine. Nothing will hurt or worry me any more, therefore I will be fine'. Similar ideas were expressed by Mrs. M.:

> ... The Lord Jesus will take us to His heavenly kingdom, where there will be neither space nor time. There will be infinite happiness, infinite love, there will be no suffering, and this will mark the end to our earthly life. Thus flesh and bones will go to the grave or will be burnt and the soul will pass to another place.

The soul alone survives. The Catholics interviewed believed that the afterlife is positive and pleasant, without suffering or pain, in fact a paradise, according to two of the respondents. Other distinctive traits of the Catholic afterlife were its infinity and the presence of God.

The majority of the Catholic respondents shared a preference for traditional burial in a grave, and their reasons for this were closely related to following either church or family tradition. At the same time, singing and music were very often mentioned as important parts of the funeral rite. Mr. M. expressed the wish to have a big funeral:

> The most important thing for me [at my funeral] is the music, music. It is essential that as many people as possible attend, friends and relatives, because I know that it will be important for them.

This wish was expressed on several occasions and was closely linked to the conviction that the funeral rite helps the bereaved to mourn and to overcome the death of a loved one. However, not all Catholic respondents favoured a grand funeral ceremony attended by a large number of mourners. Mrs. M., for example, had an entirely different wish:

> I would like to have a simple funeral, just the coffin and a Catholic priest, possibly with my husband and those to whom I was closest in life. No theatrics, but, above all, prayer. In my case it shall be in accordance with Christian law and in accordance with God's commandments.

In this case the respondent expressed a preference for simplicity, with few or no mourners present at the funeral, objecting to what she saw as the 'pomp' of the funeral ceremony.

Catholics were generally convinced that it is possible to influence the afterlife of the deceased, but their specific ideas about the relationship between the living and the dead varied. About half of the respondents believed in a two-sided relationship, with the living helping to improve the afterlife existence of the deceased through their prayers and thoughts, or by saying a requiem mass, and the deceased assisting the living as a kind of 'guardian angel'. Others believed in a relationship in which only one side, either the dead or the living, is able to affect the other. At the same time, Catholic respondents believed that neither the form of the funeral ceremony nor the method of dealing with the body could influence the afterlife of the deceased; only prayers and thoughts were considered as possibly having such an effect.

Protestants of the Church of the Czech Brethren

Protestant ideas of death and the afterlife were in many respects similar to those of the Catholics, but it was clear that certain concepts, especially concerning the afterlife, were less clear-cut. Members of the Protestant Church of the Czech Brethren perceived death as the beginning of a journey, a dividing line or a turning point in life, and at the same time they believed that physical death does not mean an end to life, since the soul is immortal. Unlike Catholics, the Protestants questioned (with the exception of one respondent) did not believe that the human life span is pre-determined. A number of respondents suggested that sudden or unexpected death is caused by the random coincidence of events; others suggested that such deaths simply cannot be explained.

Most of the Protestants questioned had no precise idea of the afterlife. A number of them claimed that their lack of any such vision was intentional; they are unwilling to formulate ideas about the afterlife because they are convinced their ideas will be wrong. Such an attitude is by no means intended to deny the

reality of an afterlife. Instead, these respondents were reluctant to attempt to imagine things that are beyond normal human experience. They were comforted by the notion that their lives would continue after death, presumably in a form other than that assumed on earth. One respondent, Mr. B., expressed his ideas of the afterlife as follows:

> Everyone has a different notion [of the afterlife] and they've probably got it wrong. When a person dies, having declared their belief in Jesus Christ, they then have the chance of eternal life. A person leaves this life and probably goes to God. Perhaps they assume a spiritual form; at any rate they are not material. I suppose the afterlife is, to a certain extent, concealed or hidden [to man]. Clearly a person should not concern themselves too much about these things and should be concerned about living their life somehow in the right way; people should leave this [eternal life] to God.

God's presence and the continued existence of the deceased in an immaterial form were the only two characteristics of the afterlife that Mr. B regarded as likely, and he declined to speculate further on the issue. A certain degree of resignation and trust in God was obvious from his comments, as was the implicit conviction that if he behaves well during his earthly existence, he may be sure that God will take care of his afterlife and that of his fellow believers.

Protestant respondents did not for the most part express a preference concerning the disposal of the body. Two respondents suggested that cremation might be a better choice, but neither insisted on this method of disposal. A number of the respondents went on to outline their specific ideas about the form a funeral should take, but most had no clear opinions on this topic. It is important to note that none of the respondents were actually opposed to the funeral ceremony. A Protestant pastor interviewed suggested that, according to the doctrine of his church, biding farewell to the deceased, delivering them up to God and giving thanks for their life were essential components of the funeral service. During the funeral speech he would:

> ...prefer not to talk too much about the deceased.... Mention of the deceased should certainly not exceed in length the most important part of the speech, that is, the part concerning God and his promises, and faith in Jesus Christ.

In the pastor's opinion the key part of the funeral ceremony should consist of remembering Evangelical teachings, and the personality of the deceased should in no way be allowed to overshadow this message. Two male respondents suggested that the most important part of the ceremony is when the priest reminds the congregation of the existence of an afterlife. Two female respondents mentioned the singing of hymns, and both of them expressed the wish to have their favourite hymns sung at their own funeral services. Two of those questioned intended to leave the decision about the precise form of the funeral ceremony to the bereaved, since they felt it was very important that their loved ones be pleased

with the funeral. One went on to say that he would prefer no sad or heartbreaking speeches during his funeral. One male respondent even went as far as to express his wish to have a happy funeral with an atmosphere like that of a wedding or a 'send off' party for someone going to live abroad for a year or two.

According to Protestant respondents it is not possible to influence the afterlife of the deceased in any way. The main reason for the funeral ceremony is to help the bereaved cope with the death of a loved one. This reason resembles that of the special commemorative funeral ceremony of the Jehovah's Witnesses.

Jehovah's Witnesses

The research revealed that Jehovah's Witnesses hold complex but remarkably uniform attitudes towards death. Three respondents stated that they saw death as a punishment for the sins of Adam and Eve and in fact, according to their convictions, as something unnatural, since God's original intention was to bless man with eternal life. In addition, Jehovah's Witnesses understood death in opposition to life, i.e. as non-existence. Accordingly, no part of man exists after death; the dead cease to exist. Such confidence in non-existence seems to correspond with the alternative perception of the soul shared by Jehovah's Witnesses compared to both Catholic and Protestant respondents, who see the soul as the part of man that continues to exist after death. The Jehovah's Witness concept of the soul rejects Greek tradition. By the soul they mean the whole being, human or animal, which with death ceases to exist. However, it is important to note that non-existence is seen as a temporary state.

The Jehovah's Witnesses interviewed did not believe in a pre-ordained destiny governing the time and cause of death. All the respondents believed that sudden death was caused by chance and the effect of unpredictable events. However, those questioned (with one exception) felt that one could to some extent affect events through individual behaviour and the way of life. It was felt a person could prolong their life by avoiding smoking and the use of addictive drugs, by not telling lies, refraining from adultery, and living in harmony with Biblical law. It was agreed, however, that such observances are only factors that contribute to longevity, and that there is no guarantee that accidental and unpredictable events cannot strike at any time and without warning.

As mentioned above, in the view of Jehovah's Witnesses the afterlife does not commence immediately after death but after varying periods of non-existence. During that period the deceased's form and identity are somehow 'filed' in God's memory so that a person may eventually be returned to life on earth. However, resurrection will only come after Armageddon:

> ...thus, after God's intervention, when He removes all evil and the people who destroy the earth and commit evil, those who are not prepared to acknowledge God's way, that is, to accept the laws that are good for the people, will, according to the

Bible, be destroyed over a thousand-year period as part of the thousand-year resurrection of the righteous and the unrighteous...

Mrs. J. explained that over a thousand-year period the dead will rise and those who are unwilling to accept God's order will be destroyed forever. The majority of people will be returned to the earth, where, according to respondents, they will live forever under the rule of Jesus Christ and his 144 000 anointed (the best of the Jehovah's Witnesses, and people with outstanding qualities, such as Moses). This limited number of faithful (144 000) will rule as immortal kings and priests with Christ in heaven and will have a non-material, spiritual form, while the rest will receive new bodies after the resurrection, material in form and essentially the same as the bodies they had in life. The main difference between the afterlife and current life lies in the non-existence of evil, suffering, pain, and death on the so-called New Earth (of the afterlife). Earth will then be an idyllic place that enjoys eternal peace, serenity, satisfaction, and prosperity. This Kingdom of God is seen as part of God's original plan, and Jehovah's Witnesses are convinced that the time of change is rapidly approaching and see the apparent increase in global disasters as a sign of this. Preaching about the imminence of God's Kingdom is one of the most essential elements of the missionary message of this international religious society.

The international society of Jehovah's Witnesses does not prescribe any specific funeral ceremony or method for disposal of the body, and in fact the funeral ceremonies of its members conform to the cultural background and traditions of the areas where the members live. Their doctrine merely requires that the body be treated with dignity and respect. But the funeral preferences of the Jehovah's Witnesses interviewed are significant in the context of contemporary Czech society. Preferences regarding how the body is handled after death strongly reflect the belief of Jehovah's Witnesses in the non-existence of a 'conventional' afterlife. Almost all the respondents[11] expressed a preference for cremation without a ceremony, followed by the scattering of the ashes. Cremation is preferred by the majority of Czechs, but the scattering of the ashes is not a preferred practice. When respondents were asked why they preferred not to have a funeral ceremony, the majority stated that they wished to avoid the unnecessary emotional displays and scenes of mourning and sadness often witnessed during the funeral ceremony, despite the fact that Czech funerals, in general, are not considered to be overemotional. Although those Jehovah's Witnesses questioned overwhelmingly expressed a preference for cremation without a ceremony at the crematorium, they did not agree on the total absence of any kind of funeral ceremony. Three respondents described having a preference for a gathering of family and friends, separate from the disposal of the body, in a memorial ceremony at the Kingdom

[11] The only exception was a female respondent who felt that what happens to her body after death was irrelevant.

Hall.[12] Perhaps one reason why other respondents did not mention this ceremony is that they do not consider it a funeral (which is what they were asked about), because the body of the deceased is not present, and traditional symbolic funeral decorations, such as wreaths and the wearing of black, are intentionally avoided. The form of this meeting differs in content from the traditional funeral in that it takes the form of a regular religious service. Mr. G. described the ceremony as follows:

> On the one hand it [the memorial ceremony at the Kingdom Hall] is an opportunity to remember and say farewell to the deceased and on the other a reminder of the expectation of the resurrection. Thus, the purpose of such a ceremony differs from a conventional funeral, which, however, in some cases may follow.[13]

What Mr. G. meant by saying the ceremony differs from a conventional funeral is that the aim of the ceremony is not primarily the physical disposal of the body but rather a spiritual celebration to both remember the deceased and to reiterate the biblical hope of resurrection. This ceremony is in no way intended to influence the afterlife of the deceased, as no such concept exists.

Members of the congregation do not usually become involved in the matter of the disposal of the body, which is seen as the family's responsibility. The memorial ceremony is organised independently of disposal. Czech Jehovah's Witnesses do not have any special traditions with regard to dealing with the body, generally leaving such matters to specialists (pathologists, funeral directors, and crematorium staff). They believe that the body after death has no further meaning or function, and therefore, it must simply be disposed of in a culturally acceptable way. Cremation followed by the scattering of the ashes is very well suited to this purpose, since both can be performed quickly and moreover there is no remaining physical evidence of the person, for example, in the form of a grave that can later be visited.

The form and meaning of funeral rites

A mutual relationship exists not only between notions of the afterlife and corresponding funeral preferences, but also between the traditions and practices of a given society, which influences contemporary rituals. Secularised rituals borrow certain symbols and meanings from traditional religious sources [*cf.* Hervieu-Léger 2004], just as religious rituals are affected by non-religious practice,

[12] The usual ceremony takes place either in a crematorium or other (secular) hall suitable to the purpose.

[13] The funeral generally corresponds to the wishes of the close relatives of the deceased, who need not necessarily be of the same religious faith and may therefore prefer to arrange a conventional funeral ceremony for the deceased.

especially in a highly secularised society [*cf.* Vandendorpe 2000; Garces-Foley and Holcomb 2006]. Official funeral rite practices generally originate in specific religious organisations (e.g. The Roman Catholic Order of Christian Funerals), but official rites are also determined by popular religiosity and secular practices, both of which play a particularly important role in secular or multi-faith societies [Larson-Miller 2006].

For religious believers, the conventions of the religious group to which they belong tend to put a check on their individual funeral preferences; although respondents may not in every case necessarily be aware of this fact. Even though more than one-third of Czech funerals take place without any form of ceremony organised by a funeral director, the respondents from religious groups expressed their preference for some kind of funeral service. Although this was taken as a given by Catholics and Protestants, Jehovah's Witnesses took a negative view of such ceremonies and strongly opposed traditional (Christian) funerals, preferring that the body be treated with the maximum of simplicity and the minimum of ceremony (cremation without a ceremony followed by the scattering of the ashes). The customs of Jehovah's Witnesses contrast sharply with those of other Christians, the vast majority of whom, irrespective of preferences for burial or cremation, opt to deposit the bodily remains in a grave or cemetery columbarium. The scattering of the ashes, preferred by Jehovah's Witnesses, is unusual in Czech society, but there is growing trend towards this form of disposal.

Conceptions about the afterlife and the alleged relationship between the dead and the living play an influential role in funeral rituals. Apart from determining the method of body disposal (burial or cremation; scattering the ashes or not), such conceptions also affect the mourning process. Praying for the deceased is most common among Catholics, who believe they are thereby able to affect the fate of the deceased. This practice was found to be less common among the Protestants of the Church of the Czech Brethren, whose funeral rituals focus less on the deceased and more on support for the bereaved. Jehovah's Witnesses, convinced that after death the deceased is temporarily non-existent, try to avoid mourning rituals altogether. The secular majority in society exhibit a similar attitude towards funeral rituals, but their reasons for doing so differ from those of Jehovah's Witnesses.

Personalised funerals, which in the past few decades have become increasingly popular in Euro-American culture [Howarth 1996; Vandendorpe 2000; Schäfer 2007; Walter 1990], are not common in either secular or religious communities in the Czech Republic. This is not owing to a lack of demand for them, but is rather because the needs of the bereaved are often unspecified and very few funeral directors are able to provide such services. The funeral industry does not work with privatised spirituality; it can accommodate either a Christian (or other established religious) ceremony or a secular one. There is no other model between the two. Most Czech funeral directors have been working in the field since the communist period and continue to offer services that are similar to those pro-

vided then. Moreover, the bereaved traditionally prefer to take a passive role in organising funeral rituals, leaving as many details as possible to specialists. Traditionally, however, the family does organise the funeral meal [Ludvíková 1971; Navrátilová 2004: 239–241], which is usually held after the funeral ceremony, for close relatives and friends, in the home of the closest relative of the deceased (or in a restaurant). This tradition is more common in smaller towns and villages than large cities. During the funeral meal, people often remember the deceased in informal talk and recall stories from their life. A personal aspect is thus introduced through this practice, which often serves to supplement the impersonal nature of the funeral ceremony. However, funeral meals usually take place after a funeral, so if there is no ceremony it often does not take place at all.

Religious rituals tend to limit the extent to which a funeral can be personalised, because priests generally follow prescribed practice, which stresses theological concepts rather than the personality of the deceased. Furthermore, as far as cremation is concerned, the priest may be able to influence only a small part of the ceremony (the speech), which is most often held, in accordance with secular practice, in a secular crematorium. Naturally, if the ceremony is held at a place of worship, complete with religious symbols and rituals, the priest is able to play a more influential role. In both cases the extent to which the funeral can be personalised is limited by religious considerations.

Drawing on Walter's [1996] scheme of ideal types (in Weber's sense), according to which there are three types of death – the religious traditional death, the medical modern death, and the personal post-modern death – I would argue that the most common in the Czech context appears to be the medical modern death. Even though elements of all three types can be observed, most Czech people die in a hospital [Kalvach et al. 2004: 20–22], the body is subsequently handled by specialists such as coroners and undertakers; the family and the clergy play a relatively minor role. As far as believers are concerned, faith may influence which method of disposal of the body and type of funeral ceremony are chosen, but even in such cases the undertaker tends to exert a strong influence on the funeral rites, just as they do in organising the way in which the body is disposed of. Reliance on specialists, whether it is a funeral director or a priest, tends to limit personal choice. Owing to the legacy of state involvement during the communist regime Czech funerals continue to be institutionally commercial and choice is severely restricted.

In relation to funerals it is possible to draw on another concept of Walter, which categorises the prevailing way in which funerals are organised and the process of their organisation in the context of society, its religion, and its institutions [Walter 2005]. In the Czech Republic, control of the funeral industry has been granted to private businesses in the form of funeral directors who pursue activities that were formerly (till 1990) regulated by the state. In comparison with the United States, which also follows the commercial model of funeral services, the situation in the Czech Republic is quite different owing to the short history of

this commercial field and owing to cultural differences. The very different view of religion in the culturally religious United States and the culturally secular Czech Republic is also a source of differences in this business. With regard to religiousness, it would be interesting to compare Czech secular funeral rites with those in other highly secularised countries, such as the Netherlands, Sweden, or New Zealand; unfortunately it is beyond the scope of this paper to do so here.[14] New rites are on the rise in multicultural Western societies, and this diversity is fuelled by immigrant populations, which bring with them different funeral customs and make the commercial model of funerals even more flexible [Howarth 2007: 247–249]. Again, however, this is not the case of the Czech Republic, which is still a very ethnically homogenous country with a very small proportion of immigrants.

Conclusion

The simplification of the funeral rite by the Czech secular majority is mirrored in the practices of religious believers, the majority of whom tend to choose funeral rituals primarily on the basis of the traditions of the group to which they belong. Personal preferences are most often adjusted to accommodate accepted religious customs. At the same time, religious funerals are to a certain degree influenced by the way in which funerals are conducted in the secular majority, especially when the funeral takes place in a crematorium.

During the course of the research, an important relationship was identified between membership of specific religious groups and preferences concerning funeral rites and, to a lesser extent, between denominations and the meaning assigned to funeral rites. The funeral was seen by most of the Catholics interviewed as a separation as it was by a number of Protestants and Jehovah's Witnesses. The funeral preferences of the Jehovah's Witnesses were most clear and group-uniform, i.e. cremation followed by the scattering of the ashes. Conversely, Catholics showed a clear preference for the traditional burial in a grave; Protestants were most ambiguous about the choice of funeral, showing a slight preference for cremation. None of the respondents felt that the form the funeral takes has any significant influence on the afterlife. The funeral was seen primarily as being more important for the bereaved than the deceased.

The majority of the Catholics interviewed saw the funeral as a dignified farewell with prayers being said to assist the deceased in the afterlife. Protestants, more than the other two groups, saw the funeral in terms of support for the bereaved and in terms of its role in the mourning process (singing and reminders of the afterlife were seen as important components of the ceremony). Jehovah's

[14] On the situation in the Netherlands, see http://www.ru.nl/rdr/; on New Zealand, see Schäfer [2007]; on Sweden, see Dahlgren and Hermanson [2005] and Reimers [1999].

Witnesses viewed the whole funeral concept in negative terms and were critical of the display of emotions during the ceremony, which, they felt, was harmful to the bereaved. In contrast to the other two Christian groups, they prefer a simple memorial service without the body, leaving no physical location (a grave or columbarium) for the bereaved to visit.

In Czech society, omitting the funeral altogether has been on the increase amongst unbelievers since the fall of the communist regime. Two main reasons are cited for this trend: first, that they wish to avoid the emotional stress brought on by the ceremony, and second, the cost of the funeral. The author argues that other reasons exist, namely, the low level of social cohesion (especially in larger towns), the anti-religious approach of the majority of the population for whom a religious ceremony is meaningless, and the lack of an emotionally fulfilling secular funeral ceremony. Even though the current trend is to minimise the funeral, keeping the remains together is still preferred (even if no funeral ceremony has been held) and despite the fact that the majority of the dead are cremated, the most common practice is to deposit the cremated remains in a grave or, less often, in a cemetery columbarium. The individualisation of the funeral, with fewer people taking part in the last rites (only the closest relatives and, possibly, friends of the deceased, as well as a number of specialists), is on the increase. It is expected that funeral practices will become increasingly personalised, catered for by a new generation of undertakers who will try harder to meet the needs of the bereaved than their communist era predecessors for simple commercial reasons. Consequently, funeral trends are probably set to change and the relatively high number of deceased or bereaved deciding to omit the funeral altogether might well decrease. As rituals are dynamically transforming according to the changes of society, last rites in the Czech Republic should become more diverse and complex and new forms should emerge in near future.

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References

Babička, V. 2005. 'Vývoj katolické religiozity v Českých zemích v letech 1949-1989.' (Shifts in Catholic Religiosity in the Czech Lands from 1949 to 1989) *Sborník archivních prací* 55 (2): 379–506.

Berger, P. L. and T. Luckmann. 1967. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. London: Penguin.

Dahlgren, C. and J. Hermanson. 2005. 'Sweden.' Pp. 60–64 in *Encyclopedia of Cremation*, edited by D. J. Davies and L. H. Mates. Aldershot: Ashgate.

Garces-Foley, K. and J. S. Holcomb. 2006. 'Contemporary American Funerals: Personalizing Tradition.' Pp. 207–227 in *Death and Religion in a Changing World*, edited by K. Garces-Foley. New York and London: M. E. Sharpe.
Gennep, A. van. 1960. *The Rites of Passage*. London: Routledge & Paul.
Hamplová, D. 2000. *Náboženství a nadpřirozeno ve společnosti.* (Religion and the Supernatural in Society. An International Comparison Based on ISSP Empirical Research) Prague: Sociologický ústav AV ČR.
Haškovcová, H. 2000. *Thanatologie. Nauka o umírání a smrti.* (Thanatology: The Science of Dying and Death) Prague: Galén.
Hervieu-Léger, D. 2004. 'Un rituel funéraire de haute modernité. Étude de cas.' Pp. 1608–1624 in *La Mort et l'immortalité. Encyclopédie des savoirs et des croyances*, edited by F. Lennoir and J. P. de Tonnac. Paris: Bayard.
Howarth, G. 1996. *Last Rites. The Work of the Modern Funeral Director.* Amityville, New York: Baywood Publishing Company.
Howarth, G. 2007. *Death and Dying. A Sociological Introduction.* Cambridge: Polity.
Jupp, P. C. and T. Walter. 1999. 'The Healthy Society: 1918–98.' Pp. 256–282 in *Death in England*, edited by P. C. Jupp and C. Gittings. Manchester: Manchester University Press.
Kalvach, Z., J. Mareš, L. Prudký, O. Ptáček, O. Sláma, M. Špinková and Š. Špinka. 2004. *Umírání a paliativní péče v ČR.* (Dying and Palliative Care in the Czech Republic) Prague: Cesta domů.
Kandert, J. 2005. 'Pohřební čas ve středoslovenských vesnicích.' (The Mourning Period in Villages in Central Slovakia) Pp. 251–255 in *Cesty na druhý svet*, edited by M. Kováč, A. Kovács and T. Podolinská. Bratislava: CERES.
Kubíčková, N. 2001. *Zármutek a pomoc pozůstalým.* (Grief and Assistance to the Bereaved) Prague: ISV.
Larson-Miller, L. 2006. 'Roman Catholic, Anglican, and Eastern Orthodox Approaches to Death.' Pp. 93–121 in *Death and Religion in a Changing World*, edited by K. Garces-Foley. New York and London: M. E. Sharpe.
Ludvíková, M. 1971. 'Pohřební pohoštění a hostiny.' (Funeral Meals and Banquets) *Národopisné aktuality* 8 (3): 211–220.
Maiello, G. 2005. 'Současné pohřební rituály v českých zemích na příkladu krematorií v Praze-Strašnicích, Zlíně a Plzni.' (Contemporary Funeral Rites in the Czech Lands Using the Examples of Crematoria in Prague–Strašnice, Zlín and Plzeň) *Český lid* 92: 35–47.
Malinowski, B. 1948. *Magic, Science and Religion and Other Essays.* Boston: Beacon Press.
Merridale, C. 2000. *Night of Stone. Death and Memory in Russia.* London: Granta Books.
Navrátilová, A. 1989. 'K analýze tendencí vývoje rodinných obřadů na současné vesnici. Obřady, spojené s úmrtím a pohřbem.' (Trends in Family Ceremonies in Contemporary Villages. Last Rites) *Český lid* 76 (3): 149–155.
Navrátilová, A. 2004. *Narození a smrt v české lidové kultuře.* (Birth and Death in Czech Folk Culture) Prague: Vyšehrad.
Nešpor, Z. R. (ed.) 2004. *Jaká víra? Současná česká religiozita/spiritualita z pohledu kvalitativní sociologie náboženství.* (What Faith? Contemporary Czech Religiosity/Spirituality from the Perspective of the Qualitative Sociology of Religion) Prague: Sociologický ústav AV ČR.
Nešporová, O. 2004. 'Existenciální dimenze současné církevní zbožnosti. Katolíci, protestanti, svědkové Jehovovi a oddaní Kršny ve vztahu ke smrti a posmrtné existenci.' (The Existential Dimension of Contemporary Church Religiosity. Catholics, Protestants, Jehovah's Witnesses and Hare Krishna Devotees in Relation to Death and Afterlife Existence) Pp. 38–55 in *Jaká víra? Současná česká religiozita/spiritualita z pohledu*

kvalitativní sociologie náboženství, edited by Z. R. Nešpor. Prague: Sociologický ústav AV ČR.

Nešporová, O. 2007. *Smrt, umírání a pohřební rituály v české společnosti 20. století.* (Death, Dying and Funeral Rites in Czech Society in the 20th Century) *Soudobé dějiny* 14 (2–3): 352–376.

Reimers, E. 1999. 'Death and Identity: Graves and Funerals as Cultural Communication.' *Mortality* 4 (2): 147–167.

Schäfer, Cyril. 2007. 'Post-Mortem Personalization: Pastoral Power and the New Zealand Funeral Director.' *Mortality* 12 (1): 4–21.

Steindl, R. 1987. *Kontinuita života. Vztah života a smrti od starověku po současnost.* (The Continuity of Life. The Relationship between Life and Death from Antiquity to Present Times) Prague: Mladá fronta.

Turner, V. W. 1974. *The Ritual Process: Structure and Anti-structure.* Harmondsworth: Penguin.

Vandendorpe, F. 2000. 'Funerals in Belgium: the Hidden Complexity of Contemporary Practices.' *Mortality* 5 (1): 18–33.

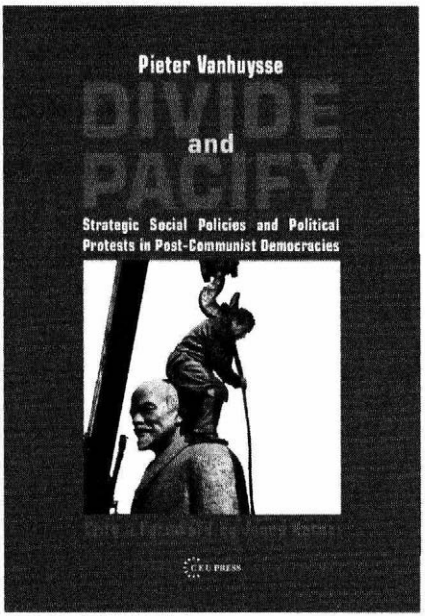
Walter, T. 1990. *Funerals: and How to Improve Them.* London: Hodder & Stoughton.

Walter, T. 1994. *The Revival of Death.* London: Routledge.

Walter, T. 1996. 'Facing Death without Tradition.' Pp. 193–204 in *Contemporary Issues in the Sociology of Death, Dying and Disposal*, edited by G. Howarth and P. C. Jupp. London: Macmillan Press.

Walter, T. 1999. *On Bereavement. The Culture of Grief.* Buckingham: Open University Press.

Walter, T. 2005. 'Three Ways to Arrange a Funeral: Mortuary Variation in the Modern West.' *Mortality* 10 (3): 173–192.



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Divide and Pacify by Pieter Vanhuysse

Despite dramatic increases in poverty, unemployment, and social inequalities, the Central and Eastern European transitions from communism to market democracy in the 1990s have been remarkably peaceful. This book proposes a new explanation for this unexpected political quiescence. It shows how reforming governments in Poland, Hungary and the Czech Republic have been able to prevent massive waves of strikes and protests by the strategic use of welfare state programs such as pensions and unemployment benefits.

Divide and Pacify explains how social policies were used to prevent massive job losses with softening labor market policies, or to split up highly aggrieved groups of workers in precarious jobs by sending some of them onto unemployment benefits and many others onto early retirement and disability pensions. From a narrow economic viewpoint, these policies often appeared to be immensely costly or irresponsibly populist. Yet a more inclusive social-scientific perspective can shed new light on these seemingly irrational policies by pointing to deeper political motives and wider sociological consequences.

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Pieter Vanhuysse ... is a political scientist, an economist and a sociologist in one person. Through his original synthesis of insights from these various disciplines, he shows how an interdisciplinary perspective can help to make better sense of phenomena that appear to be puzzling, or that remain unaddressed, from the point of view of any one discipline. ... *Divide and Pacify* ... suggests that extensive social policies can be politically efficacious strategies, while never forgetting that such measures are needed to alleviate people's suffering in the midst of traumatic social changes. ... the core message of this book is important, and it has a larger relevance across many settings in which democratic governments face the task of implementing costly reforms in complex and uncertain policy environments.

From the Foreword by János Kornai

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Illegal Waste Transport and the Czech Republic: An Environmental Sociological Perspective

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Abstract: In late 2005 Czech authorities first began to discover substantial amounts of municipal waste illegally transported from Germany to the Czech Republic. The dumping of more than 30 000 tonnes of German waste in 'black dumps' throughout the Bohemian countryside raised social, economic, and political questions about how to mitigate the negative human health and environmental impacts and prevent dumping in the future. In addition to prompting practical policy questions, the situation challenges sociologists to theorise the causes, effects, and possible responses to the problem. This article draws on the environmental sociological Treadmill of Production (ToP) theory to examine the role of the state in managing the crisis. The author presents the history of the Bohemian illegal waste problem and then describes and analyses relevant waste management policies in the Czech Republic, Germany, and the European Union in the light of the ToP theory, which hypothesises that environmental degradation is caused primarily by institutional political-economic forces, and that the protection of environmental quality can be achieved only through structural reform. The dilemma of illegal waste shipment highlights the difficult role of the government, which must balance its responsibilities to protect environmental quality and human health and promote commerce and economic growth in an international context. Data from interviews and documentary analysis are used to describe the case study and test the ToP theory. The author concludes that while the ToP theory is useful for analysing the illegal waste issue by highlighting the structural character of the problem, some refinement of the theory may be necessary to better understand this case study.

Keywords: Czech Republic, environmental policy, environmental sociology, Treadmill of Production theory, waste management
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Introduction

The story of recent illegal transport of German waste into the Czech Republic begins in 2005. But rather than being a new phenomenon limited in scope to two nations, the situation fits an historical pattern of illegal international German waste

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shipments and raises questions about the broader policy context for regulating waste transport in Europe.

This article seeks to place the phenomenon of illegal transport and disposal of municipal waste from Germany into the Czech Republic in sociological perspective. First, the environmental sociological Treadmill of Production (ToP) theory is introduced to provide a framework for analysis. Then, methods used for the research are explained. The article then presents empirical evidence describing the recent incidence of illegal waste shipment and disposal, including an overview of relevant policies. The article concludes with a critical analysis of the applicability of the ToP perspective to this case study.

Theory

The sociology of waste management

The topics of international waste shipment and waste management in general have not been the focus of much social science research. Waste management is most often seen as a technical issue to be handled by engineers, as an administrative issue to be handled by regulators, or as a political-legal topic to be handled by policy-makers and law enforcement. But a key focus of social science research is the nature of modern industrial society, which includes an examination of patterns of production and consumption. What often goes unnoticed is the fact that all social and economic activities entail the production of waste that must somehow be disposed. Factories produce not only goods, but pollutants and scrap materials. Virtually everything we consume – from food to clothes to autos to mobile phones – will end up in a landfill or otherwise be thrown away. But where is 'away'? Where does the stuff go after we put it in the rubbish bin?

The fact is that waste never goes away. It may be reused, recycled, burned, or buried – but all these processes have their social and environmental costs and benefits. In his novel *Love and Garbage*, Ivan Klíma [1990] observed, 'No matter ever vanishes. It can, at most, change its form. Rubbish is immortal, it pervades the air, swells up in water, dissolves, rots, disintegrates, changes into gas, into smoke, into soot, it travels across the world and gradually engulfs it'.

The continual production of waste raises serious public policy issues. European researchers have noted the environmental and sociological significance of waste management: 'The production of waste is closely tied to other issues, including consumption patterns, lifestyle, jobs and income levels, as well as a host of other socio-economic and cultural factors. Therefore, it is important to view waste management within the larger arena of socio-economic development and resource management. ...Waste management is recognized as a key area in environmental protection, as it is where the outputs of production, distribution, and consumption interface with the natural environment – soil, air, water, climate' [Hansen, Christopher and Verbuecheln 2002: 3].

Over time – paralleling other social changes such as rising income, urbanisation, and an increasing division of labour in the Western world – a rational municipal garbage collection system came into existence in most European settlements. As with the provision of other services, garbage collection today – whether fulfilled by the public or the private sector – has in many societies proven to be susceptible to corruption [Cowan and Century 2003; Massari 2003]. The illegal trade in waste has been shown to exist all over the world, and is driven mainly by the lure of big profits. People want to be rid of their garbage, and many companies are happy to provide the service – legally or illegally.

The question of how to manage waste generated by economic activity has been the subject of environmental sociology theory for some time. Treadmill of Production theorists take a critical view of the economic values and practices that have led to environmental degradation in the modern world, including the production of wastes – a situation which they theorise emerges from the fact that industrialised society is based on an ideology of constant economic growth.

ToP and waste

The ToP theory is a critical political economic approach to understanding society-environment relations, especially the causes, effects, and possible solutions of environmental problems. The treadmill perspective suggests that illegal waste transport is a systemic problem. The logic of constant economic growth produces ever-increasing amounts of waste, and in a globalised economy waste export is predictable, especially within a borderless Europe. European Union policies and principles intended to promote sustainable development may be overwhelmed by competing economic interests, and individual states may not only be constrained in their ability to control environmentally destructive behaviour, but have difficulty balancing economic and ecological obligations. The key claim of the ToP is 'that capital-intensive economic expansion is intrinsic to capitalist-market societies, due to the structure of the economy and the role of the state, and involves an intrinsic tendency toward environmental degradation' [Buttel 2004: 330–332].

The 'treadmill' model, as initially laid out in Allan Schnaiberg's *The Environment* [1980], is a metaphor for the functioning of the modern industrial capitalist political economy. ToP theorists observe that the economy is characterised by constant expansion and driven by the maximisation of profit by private interests. Such a system has social and ecological consequences, which include growing social inequality and conflict, and ever-increasing pollution and raw material extraction.

Equally important is the exercise of power and manipulation of the political system towards growth for the benefit of economic and political elites. 'Big government' and 'big business' interests are often aligned to promote economic expansion at almost any cost [Gould, Pellow and Schnaiberg 2004: 297]. Research

to test the ToP theory empirically has demonstrated, for example, that corporate involvement in waste management and recycling systems can contribute to social and ecological problems by undermining local government authority and creating hazardous work conditions [Weinberg, Pellow and Schnaiberg 2000].

The ToP theory focuses on the production side of the economy because this is the physical location of the first interaction between society and nature. Consumption follows production, and while consumption has obvious environmental impacts it is a less direct relationship than that between production and the environment. In the United States, for example, household garbage amounts to only about two percent of all waste nationwide. This includes common items such as kitchen scraps, textiles and furnishings, yard trimmings, packaging, and electronics. Most waste is produced in resource extraction and industrial and manufacturing processes [Royte 2005: 282–283]. Similarly, of the total annual volume of waste generated in the Czech Republic in 2005 (more than 29.8 million tonnes), only about 4.4 million tonnes, or about 15%, was municipal waste. The majority was instead industrial, mining, and agricultural waste [Czech Ministry of the Environment 2007, Table A3.1].

ToP theorists observe an unequal power dynamic between producers and consumers. Not only do individuals have little choice but to buy what is produced, but producers use advertising and influence the mass media to shape consumer preferences and increase demand. This helps perpetuate the treadmill cycle of ever-increasing economic activity and ever-increasing waste production [Schnaiberg and Gould 1994; Gould, Pellow and Schnaiberg 2004]. The state plays an important role in maintaining and supporting this pattern of production and consumption. In fact, the state faces contradictory imperatives: it is responsible for protecting human health and the environment, but it also exists to promote economic welfare. Thus the state as environmental regulator – the so-called environmental state – is pulled in different directions. When these roles come into conflict, politicians and bureaucrats, owing to ideological belief and/or material concerns, generally err on the side of economic growth rather than environmental protection. Both labour and capital tend to prioritise economic growth, and such interests exert political pressure through lobbying and campaign donations [Schnaiberg, Pellow and Weinberg 2002].

To protect the environment, the response to producer power must be political, says Schnaiberg, who theorises that an effective counterbalance can only be achieved when individual consumer-citizens organise themselves into social movements and non-governmental organisations to pressure the public and private sectors. Collective action, he says, is more effective for environmental protection than individuals making private lifestyle choices. Positive change will only occur through conflict with the political and economic decision-making elite. 'Radical restructuring of the political economy' is necessary [Gould, Pellow and Schnaiberg 2004].

Such views have clear implications for waste management policy. Europeans should not rely simply on market mechanisms or environmental education to change individual and collective practices that impact the environment. Furthermore, environmental problems occur within the context of a globalised economy. For example, the globalisation process may have allowed some wealthy nations to adopt strict environmental policies at the expense of developing nations. Many polluting industries have been moved to third world locations, allowing the global north to export environmental risk to the south. ToP theorists observe that the treadmill has become 'transnationalised' because investment capital flows freely to areas where production costs are lowest [Gould, Pellow and Schnaiberg 2004].

Developing nations are attractive to international capital for several obvious reasons. Cheap labour, weak environmental laws, and corrupt business and government can lower the cost of production. In essence, multinational corporations achieve bigger profits by externalising more of the costs of production. In addition to facilitating ecological destruction, this phenomenon often has the effect of weakening the ability of locals to organise to counter-treadmill interests.

As a nation peripheral to the economic powerhouse of Western Europe, in many ways the Czech Republic has benefited from globalisation. With a relatively low-priced and well-educated work force, the nation has attracted foreign investment. New industries have provided well-paid skilled jobs and often use techniques that are less polluting than those of communist-era firms. But the Czech Republic is also experiencing some downsides of globalisation, and illegal waste shipment is one example. In line with the ToP theory, as new strict regulations come into force and waste treatment costs rise in Germany, it is natural for Germans to seek cheaper disposal alternatives. There was strong evidence already in the early 1990s that the shipment of waste to Central and Eastern Europe could have negative social and ecological effects [Dopp 1997; Andersson 1999]. The problem of illegal or 'black' dumps in Bohemia has highlighted the strengths and weaknesses of the current waste policies intended to regulate this trade.

Methods

This research about the causes and effects of illegal waste shipments into the Czech Republic began in the winter of 2006 with the cataloguing and analysis of news media reports about the discoveries of black dumps. The sources of information were expanded to include a variety of documents, including government reports and statements, academic papers, articles, and books. These documents were selected to provide information about the context of existing and proposed waste management and environmental protection regimes in the Czech Republic, Germany, and the EU. Later, semi-structured interviews with key informants and correspondence with Czech government officials were conducted to elicit information about the public policy-making process and the investigations into

illegal activity. The author attempted to contact German officials and experts to learn more about German perspectives on the issues, but such inquiries received no replies. Information and analysis about German waste management, environmental protection, law enforcement, and transport issues are instead based on government documents, media reports, and other sources.

Findings

Illegal waste transport and the Czech Republic

In the autumn of 2005 and the winter of 2006, Czech authorities discovered that significant amounts of municipal waste were being illegally transported into Bohemia from Germany. Illegal transports continued to be intercepted by police and customs officials throughout 2007.[1] The waste was detected primarily through the interception and inspection of trucks headed to black dump sites. By the spring of 2006, the Czech Environmental Inspectorate (CEI) determined that much of the waste came from German federal states, including Baden-Württemberg, Bavaria, Brandenburg, Lower Saxony, North Rhine-Westphalia, Rhineland-Palatinate, Saxony, Saxony-Anhalt, and Thuringia.[2]

Black dumps were found in a variety of locations within the Czech Republic, mostly in North Bohemia near the German border. A total of twenty-six illegal dumps were documented in the media as containing waste that appeared to have originated in Germany. The sites where waste was dumped illegally included open fields and lots, farm buildings, a vacated military airfield, warehouses, and even legal landfills. In sum, the CEI identified about 30 000 tonnes of alleged illegal German waste dumped in Bohemia. Of this amount, about 15 000 tonnes was ultimately landfilled within the Czech Republic by the summer of 2006, and only about 7000 tonnes was satisfactorily proven to be of German origin.[3]

In January 2006, Czech authorities discovered what was to become perhaps the most notorious dump, near the village of Libčeves in North Bohemia. There inspectors found around 4000 tonnes of municipal waste from Germany – the equivalent of about 200 tractor-trailer truckloads – stored out in the open and in a barn. Some of the waste was hazardous, and the improper storage attracted pests and threatened to contaminate the soil and water. To make matters worse, the dump was set ablaze on three different occasions during the spring, releasing smoke into the air over the town [ČTK 2006a]. It is believed the waste was de-

[1] Personal interview with Lubomír Doskočil of the Czech Customs Administration in Prague, Czech Republic, 25 June 2007.

[2] Personal interview with Jitka Jenšovská of the Czech Environmental Inspectorate in Prague, Czech Republic, 2 August 2006.

[3] Personal interview with Jitka Jenšovská of the Czech Environmental Inspectorate in Prague, Czech Republic, 19 May 2006.

liberately lit to destroy evidence of the crime. While there was evidence that the materials in Libčeves originated in Saxony-Anhalt, it was difficult to prove who should be responsible for cleaning them up. When it was finally agreed that the government of Saxony-Anhalt should repossess the waste, only about 750 tonnes were taken back to Germany, and the remainder was landfilled in the Czech Republic [ČTK 2006e]. A Czech waste hauler was fined ten million Czech crowns for creating the dump, but avoided payment by declaring bankruptcy.

Czech authorities responded in several ways to the dumps found throughout Bohemia, including through regulatory reforms and both cooperation and confrontation with their German counterparts. At first, the Czech government considered banning all waste imports [ČTK 2006b]. A rule broadening the list of wastes requiring permits to enter the country took effect in March 2006 but was almost immediately abandoned as impracticable. Additionally, the rule was deemed at variance with EU waste shipment regulations and interfered with the legitimate cross-border waste trade critical to the Czech recycling industry.

More border checks were combined with higher potential fines for violators. Parliament raised the maximum fine for improper waste import from ten million to fifty million Czech crowns [ČTK 2006h]. Fines were imposed on several companies, and numerous suspects were arrested. By late April 2006, five Czechs and one German had been arrested for involvement in the illegal transports [ČTK 2006d]. In total, four Czech companies were fined between a quarter of a million and ten million crowns for their participation in the smuggling. By June 2006, the CEI announced plans to seek prosecution of up to twenty German companies [ČTK 2006g].

During the crisis a special German-Czech environmental commission was created and a 'Roadmap for the take back/disposal or recovery of illegally shipped German waste to the Czech Republic' was signed by the environment ministries of both nations in early May 2006. Despite this agreement on paper, however, the Czechs felt that the German authorities were not particularly forthcoming with assistance in solving the crime and determining responsibility for clean-up.[4] At the international level, the Czech Republic advocated stricter regulation of the waste trade, both in Brussels and in solidarity with its neighbours in the Visegrád group, which comprises the Czech Republic, Hungary, Poland, and Slovakia [ČTK 2006f].

A review of relevant policies

There are several important policies and principles that guide EU and national waste management practices that are key to understanding the illegal transport problem.

[4] Personal interview with Jitka Jenšovská of the Czech Environmental Inspectorate in Prague, Czech Republic, 18 July 2006.

European Union policy

The three big directives intended to define EU waste policy and encourage eco-friendly waste management practices are the Framework Directive (75/442/EEC, amended by 91/689/EEC), the Packaging Waste Directive (94/62/EC), and the Landfill Directive (99/31/EC). The Waste Shipment Regulation (259/93/EC) governs the international waste movement. A myriad of other directives regulating specific waste issues, such as electronics waste and motor vehicle disposal, also took effect in recent years. Together these directives have shaped the context in which German and Czech waste management practices have developed since 1990. There is an interesting and perhaps ironic history to this policy-making process, since over a period of many years Germany has pressured the EU to adopt stricter waste policies. For example, the Packaging Waste Directive (94/62/EC) is based heavily on German policies for the collection and recycling of packaging. At the same time, recent Czech environmental policy reform has been motivated almost entirely by the need to conform to requirements involved with becoming an EU member state in May 2004 [Vail 2005]. Thus, Czech restrictions on the import and disposal of foreign waste have been driven at least indirectly by German initiatives.

Over the decades, numerous principles expressed in EU law have been intended to guide environmental policy in general. Several have clear relevance for the areas of waste management and transportation, such as the polluter pays principle (PPP) and the proximity principle. The PPP says that those who produce pollution are legally and financially responsible for the clean-up of the pollution. The aim is to internalise environmental costs as an incentive to better practices [McCormick 2001: 75]. The proximity principle states that environmental problems should be dealt with as close to the source of the problem as possible. In the context of waste management, the principle calls for waste to be treated and disposed of as near to its place of origin as possible, with the goal of regional and national self-sufficiency in waste generation, treatment, and disposal.

The waste hierarchy is another concept that guides EU waste management policy. It establishes an order of priority for the treatment of waste, which includes, in order of most preferred to least preferred options: waste prevention and reduction, reuse, recycling, recovery, and disposal [Betts, Novak and Young 2002: 13; Hansen et al. 2002: 4].

The overarching policy context for handling the Czech-German waste transport dispute was set by Waste Shipment Regulation (WSR). Titled 'Council regulation 259/93 on the supervision and control of shipments of waste within, into and out of the European Union', it transposed the Basel Convention on hazardous waste shipments and OECD regulations on waste transport. The regulation classifies wastes by risk, requires prior authorisation for the shipment of waste, and stipulates that unauthorised waste must be returned to its source of origin or otherwise properly disposed of. Wastes on the 'green list' – materials to be recy-

cled or reused, such as plastic bottles or paper – can be transported freely, but restrictions apply to more hazardous amber and red list materials [European Commission 2005]. The WSR specifies the process for resolving illegal transboundary waste transport. If waste is determined to have been transported illegally, the 'notifier' – the source of the waste – must take responsibility for its return and proper disposal. The 'competent authorities' of the states involved – usually the national Environment Ministry – are required to cooperate in determining where the waste originated and to take the appropriate steps for remediation.

A new WSR (1013/2006), which is described as 'simpler but a bit stricter' than 259/93, came into force on 12 July 2007 [Zegnál 2006]. In late 2005 the European Parliament approved the new regulation, intended to harmonise EU policy with new international standards and streamline the waste transport authorisation process.

Czech policy

The Waste Act of 2001 and the national Waste Management Plan (WMP) of 2003 set the context for Czech waste policy. Basically, these policies harmonise Czech law with EU requirements. The Waste Act prohibits the import of waste for disposal or energy production but allows wastes to be imported for recycling or further processing. Regarding waste imports, in accordance with EU law, the Czech government requires financial guarantees, or a deposit, to be paid in advance by the hauling companies. The deposit (or evidence of proper insurance) is held by the government and released back to the importer when proper proof of delivery and treatment is shown. However, black market haulers rarely conform to this requirement. The WMP calls for the gradual elimination of barriers to the free movement of non-hazardous wastes intended for recovery, the minimisation of transboundary movements of waste for disposal, and cooperation with neighbouring countries to control the import and export of wastes [Czech Ministry of the Environment 2003: Chapter 3.5 a-f].

German policy

Germany has an international reputation for strict and innovative waste management practices. For example, the 'Green Dot' recycling programme started in the 1990s under the *Duales System Deutschland* was a pathbreaking policy designed to increase recycling rates and reduce waste production. The Green Dot has become a model for recycling programmes throughout Europe, including the Czech Republic, where it operates under the Eko-kom company. The Closed Substance Cycle and Waste Management Act (CSCWMA), which took effect in October 1996, codified the polluter pays principle and introduced incentives for material- and energy-efficient production processes and re-use of materials. In

2001, a new waste storage ordinance went into force in Germany. Under this ordinance, municipal waste may no longer be landfilled directly. Instead, rules requiring waste to be incinerated or subjected to mechanical-biological treatment before final disposal came into effect on 1 June 2005. These processes reduce the volume of waste to be interred. Poorly lined landfills are to be gradually closed down by 2009.

The question arises whether German legislators and regulators considered the immediate practical implications of the new rules. The landfill ordinance granted no exceptions for untreated waste to be landfilled. While Hempen [2005] said there was 'little data available' to predict the country's waste storage capacity after 1 June 2005, she cited data suggesting a national 'capacity shortfall of at least 2 million tons' could be expected. Among the options suggested by the German government to handle the overflow was 'export of waste'. Before the 2005 rules took effect, export of waste was among the possible solutions considered by the German government to handle the overflow [Hempen 2005].

When the rules were applied, 200 of 333 official landfill sites were closed, driving up waste treatment costs [Schaschek 2006]. The German newspaper *Freie Presse* reported that 'the price for legal storage of one tonne of domestic waste is about 32 euros in the Czech Republic, while an incinerator in Saxony, for instance, requires 170 euros per ton. The storage of one ton of domestic electronic waste costs 180 euros in the Czech Republic and 350 euros in Germany. The prices at illegal dumps are even lower' [quoted in ČTK 2006c].

Policy assessment: strengths and weaknesses

The Germans already knew that it was difficult to enforce laws restricting cross-boundary waste movement. In 1997, there were 40 000 cases of reported environmental crimes in Germany, of which nearly 29 600 were cases of unsafe waste management, including 58 cases of illegal transfrontier waste shipment. The police's success rate at solving environmental crimes in that year was 60% [Gallas and Werner 1998: 377].

Environmental offences in Germany, especially illegal waste transport violations, have rarely been prosecuted and punished because crimes most often go unreported and it is hard to find incriminating evidence. 'If a case comes before a public prosecutor despite these obstacles, the public prosecutor or the judge usually will stop investigations. In case a wrongdoer is actually sentenced, imprisonment is rarely imposed; in addition in most cases of imprisonment up to two years probation is granted. Usually a criminal ban on a professional activity is imposed in serious cases only, i.e. if there is a danger of recidivism. In 1996 there were two cases' [Gallas and Werner 1998: 378]. Federal environmental officials have identified a number of problems with current arrangements of German environmental crime enforcement. In general, they say it is difficult to prove guilt

in environmental crimes. Within Germany, many officials lack training and qualifications for dealing with eco-crime, and cooperation between environmental authorities and the police is slow. In international cases, there is a lack of cooperation between competent authorities, in part because, rather than having a single national competent authority (CA) under the WSR, each German federal state has its own CA. There is also a language barrier. 'The legal situation becomes much more complicated and less known as the number of authorities and (within Europe) languages involved multiplies' [Gallas and Werner 1998].

Germany has long had a reputation as the biggest waste exporter in Europe and has sent waste both legally and illegally to many European nations. Waste from the Federal Republic of Germany was sent for disposal to the German Democratic Republic for many years before the end of communism. German waste exports to Eastern Europe have been widespread at least since the revolutions of 1989. Much of this transport has taken the form of 'dump and run' disposal, with Greenpeace Austria claiming that most of the trade in waste is illegal [Ram n.d.]. In the 1990s the European Commission determined that the German recycling system led to 're-dumping' in other European nations [Dopp 1997]. There were warnings early on that EU expansion could put Eastern European nations at risk of illegal waste transport. The German government itself warned of an inevitable 'suction effect' drawing waste from Western Europe, especially Germany, to the new member states [Czarnomski, Holmes and Webb 2006: 90]. Other European nations that have had problems with illegal or improper German waste imports since the early 1990s include France, Albania, Poland, Hungary, and Slovakia.

An examination of the many known cases of illegal German waste export over the last twenty years reveals patterns. Intense pressure within Germany caused by increasing waste generation and decreasing capacity create economic incentives to find quick and easy solutions. As a result, when Germans have sought to export waste, companies or individuals in the receiving nations have conspired to dispose of the waste cheaply, often in questionable ways. The recent appearance of black dumps in Bohemia follows this pattern.

Discussion and conclusions

While a great deal of media attention was devoted to the German waste issue in the first half of 2006, the question remains whether the transports will continue in the future. According to the Czech Customs Administration, illegal waste transports continued to be intercepted in 2007, though in fewer numbers than in 2006.[5] Study of black dumping in Bohemia suggests that the waste transport policies and practices within individual nations and throughout the EU have contributed

[5] Personal interview with Lubomír Doskočil of the Czech Customs Administration in Prague, Czech Republic, 25 June 2007.

to the phenomenon of illegal waste shipment, and until loopholes allowing free trade in waste labelled for recycling, coupled with weak enforcement, are remedied, there will continue to be a high probability of successful illegal transport. While it can be said that the illegal waste trade that led to the Bohemian black dumps is a product of economic incentives, those incentives are shaped by policies at the national and EU level. For the sake of discussion this section analyses the consequences, both intended and unintended, of existing policies in the context of the ToP theory.

ToP insights into the Czech case

Several conclusions can be drawn about the effects of current waste transport policies. While ToP provides a useful basis for understanding this case study, the theory may benefit from refinements to its interpretation of the environmental state.

1. Illegal export was a predictable consequence of the 2005 German landfill rules

It has already been noted that waste exports in the past occurred at times of limited German capacity. The possibility of illegal export to the Czech Republic was a predictable result of the recent landfill regulations – both theoretically from a ToP perspective, and empirically based on the long history of German waste exports. In 2002, as the June 2005 landfill reform deadline approached, 61 waste incinerators were operating in Germany. At that time, the incineration capacity could handle only 40% of the expected requirements for 2005 [Scottish Parliament Information Centre 2002: 22]. The OECD [2004] in 2004 pointed out that this low disposal capacity risked causing 'higher prices for waste disposal and exports of waste to neighbouring countries' [Ibid: 32]. This resulted in clear economic incentives to evade the new German law. The OECD explains that when materials are banned or redirected from landfills, which was the aim of the German legislation, 'the hope, of course, is that these products will, as a result, be recycled. But the incentive offered by the tax or ban is not an incentive to recycle, but rather an incentive to *not landfill*. Illegal dumping, exporting, and incineration are also stimulated' [Ibid.: 142]. Moreover, Hempen's [2005] analysis demonstrated that before 2005 authorities were able to calculate a waste processing shortfall of nearly two million tonnes caused by the new waste storage ordinance. The German association of incinerator operators (ITAD) warned before amendments to the EU's WSR took effect in 2007, 'If mixed green waste will not undergo a specific control, then it is expected, particularly for the Federal States at the eastern border, that an increasing amount of waste will be exported' [ITAD 2004].

From a ToP point of view, this raises questions about the sincerity of the German government's desire to enforce waste export law – in what may amount

to a tacit collaboration between national authorities, municipalities, and/or businesses to reduce operational costs. Such an interpretation is consistent with the ToP hypothesis that governments and business often collaborate as a 'growth coalition' to promote economic activity at the expense of environmental quality [Schnaiberg 1980; Schnaiberg, Pellow and Weinberg 2002]. However, further research on this particular case of German waste import is required to test this hypothesis more definitively. At any rate, the lack of responsiveness and cooperation on the part of German authorities with their Czech counterparts shows that the Czech state faces constraints on its ability to protect public and environmental health from waste transports from abroad.[6] Even when illegal transport could be foreseen, both national governments had difficulty stemming the flow.

2. The export of waste shifts environmental risk from Germany to other nations and undermines sustainability principles

ToP stresses that environmental issues involve issues of social equity, and the theory's critique of economic globalisation is relevant to understanding illegal waste transport. The proximity principle was articulated in large part due to the recognition that localities have a responsibility to manage their own waste and should not ship it elsewhere – whether legally or illegally. The polluter pays principle further reinforces the notion that waste producers should bear the burden of proper disposal and cleanup. Restrictions on export provide incentives for waste reduction or recycling. Unrestricted export means that producers may push waste processing risks on others, undermining EU and German principles of sustainable development. In this case, Germans have benefited at home from strict landfilling laws and Czechs have been made to bear the costs of disposal. In a globalised world, this makes the Czech Republic look like Germany's backyard refuse pile – in contradiction of the German CSCWMA, which touted the economic and ecological benefits of a closed product life-cycle. This law aimed to 'close the loop' between production and consumption, but the option of exporting waste defeats such goals by making the product life-cycle an open system. German waste export to Bohemia shifts the risk abroad and externalises the costs of production and consumption.

Not only is this an instance of waste flowing 'downhill' in a globalised world, but it highlights the ToP assertion that structural change is necessary for movement towards sustainability. 'Most "reasonable" scholars have taken revolutionary or even macrostructural change to the political economy off the agenda, as either unrealistic or impossible. They may be correct. In that context, the treadmill implies that the dream of solving environmental crises and achieving "sustainable development" is unlikely or impossible.' [Gould, Pellow and Schnaiberg 2004]

[6] Personal interview with Jitka Jenšovská of the Czech Environmental Inspectorate in Prague, Czech Republic, 18 July 2006.

3. Policy loopholes – intentional or not – make illegal transport easy and lucrative.

Despite the social and ecological inequities that characterise the crime, it is simplistic to depict Germany as the villain and Bohemia as a purely innocent victim. Indeed, the Czech Environment Minister at the time, Libor Ambrozek, initially blamed the situation on Czechs who helped Germans bring the waste into the country. 'German businessmen often do not know that they are sending waste to the Czech Republic at variance with law', he said [ČTK 2006b]. The extent to which corruption on either side of the border may have contributed to the problem remains unclear.

As indicated earlier, illegal waste shipment in the EU is widespread and hard to deter and detect. This appears to be partly due to a business climate that promotes free trade, partly because waste is a difficult commodity to monitor and control, and partly because states prioritise other areas for law enforcement. One study by the network for the Implementation and Enforcement of Environmental Law (IMPEL) revealed that in October 2005 about 50% of inspected waste shipping out of the EU was illegal [Netherlands Ministry of Housing, Spatial Planning and the Environment 2005]. Another enforcement action found that of 88 000 tonnes of waste bound for export 72% may have been illegal. Also, 93% of the documents authorising transport were irregular in some way, and there was only a 6% probability of an illegal waste shipment being detected by law enforcement authorities [Roelofs 2006]. As they schemed to enter Bohemia, waste smugglers were able to forge documents or mislabel municipal waste as recyclable material. With the Czech accession to the EU these smugglers could expect limited or non-existent border checks.

The existence of loopholes and institutional obstacles to the effective enforcement of waste transport rules shows that the ToP theory may inadequately theorise how the state functions in its role as protector of environmental quality and human health. Not only may the state lack the will to protect the environment, but there may be practical constraints to enforcing the law even when the will is present. Moreover, the Czech case demonstrates that there is a scale issue involved, because different levels of government may have different interests in environmental policy and enforcement. In this respect, there has been conflict between local and central authorities within the Czech Republic, and between nation states and the EU. Locals living in the affected areas of Bohemia had an understandably negative experience of illegal waste import. But some municipal and regional governments have expressed support for changes in the law which would allow more waste to be imported legally for incineration. The city councils of Liberec and Brno have lobbied to allow German waste to be burned in their municipal incinerators. But the central government has consistently opposed illegal or legal waste import.

At the international level, while the WSR calls for cooperation between national competent authorities, the Czech and German states have clashed over

how to resolve the black dump question. Meanwhile, at the EU-level some states and the incineration industry are now lobbying to allow unfettered trade in waste for use as an energy source. This shows that the 'environmental state' may not be a monolithic institution, and interests compete to influence environmental policy at different levels of governance. Therefore, the ToP theory should be further developed to account for variability in environmental protection within the state.

Future directions for research

Further research is needed to better understand the issue of waste imports in the Czech Republic, which is an ongoing phenomenon, and to test how the ToP theory applies to the situation. It would be educational to do fieldwork in the affected region, including interviewing locals about their experiences. It is also an open question to what degree public and private corruption within the Czech Republic, and between Czechs, Germans and possibly others, plays a role in the illegal transport business. The situation must be analysed within the context of a changing EU policy milieu, as the European Court of Justice interprets existing rules and a new framework directive on waste and a separate thematic strategy on the prevention and recycling of waste are being debated in Brussels.

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References

Andersson, M. 1999. M. *Change and Continuity in Poland's Environmental Policy*. Dordrecht, Netherlands: Kluwer Academic Publishers.

Betts, M., P. Novak and T. Young. 2002. *Waste Management Plan for the Czech Republic: Final Report, Volume 2 – Actions Required for Completion of National Waste Management Plan*. Abingdon, UK: AEA Technology Environment. Retrieved 19 March 2007 (http://ec.europa.eu/environment/enlarg/pdf/reap/reap_report_annex3_czech_waste_en.pdf).

Buttel, Frederick H. 2004. 'The Treadmill of Production: An Appreciation, Assessment, and Agenda for Research.' *Organization and Environment* 17 (3): 323–336.

Cowan, Rick and Douglas Century. 2003. *Takedown: The Fall of the Last Mafia Empire*. New York: Berkley Books.

ČTK. 2006a. *Some 15 000 Tonnes of German Waste Stored in Czech Republic*. 14 February 2006.

ČTK. 2006b. *Paroubek to Write to Merkel over Illegal Waste*. 22 February 2006.
ČTK. 2006c. Saxony *to Alert Czechs about Suspicious Lorries with Waste*. 7 April 2006.
ČTK. 2006d. *Waste Smugglers Arrested*. 20 April 2006.
ČTK. 2006e. *Czechs say Libčeves Waste Dangerous, Germans Disagree*. 4 May 2006.
ČTK. 2006f. *V4 Countries Agree on Joint Procedure against Waste Import*. 5 May 2006.
ČTK. 2006g. *Inspection Wants to Fine Germans for Illegal Waste Imports*. 12 June 2006.
ČTK. 2006h. *Czechs Try in EU to Prevent Import of Waste*. 27 June 2006.
Czarnomski, S., A. Holmes and B. Webb. 2006. 'IMPEL-TFS Threat Assessment Project: The Illegal Shipment of Waste among IMPEL Member States.' London: Jill Dando Institute of Crime Science, University College London. Retrieved 30 March 2007 (http://ec.europa.eu/environment/impel/pdf/tfs_threat_report.pdf).
Czech Ministry of the Environment. 2003. *Waste Management Plan of the Czech Republic*. Prague.
Czech Ministry of the Environment. 2007. *Statistical Environmental Yearbook of the Czech Republic 2006*. Retrieved 23 October 2007 (http://www.env.cz/www/dav.nsf/rocenka_06/06_titul.htm).
Dopp, J. L. 1997. 'German Municipal Waste and EC Waste Policy.' Washington, DC: American University Trade & Environment Database Case Studies, Vol. 7, No. 2. Retrieved 3 March 2007 (http://www.american.edu/TED/msweu.htm).
European Commission. 2005. 'Supervision and Control of Shipments of Waste.' Retrieved 27 October 2006 (http://europa.eu/scadplus/leg/en/lvb/l11022.htm).
Gallas, A. and J. Werner. 1998. 'Transboundary Environmental Crimes: German Experiences and Approaches.' Paper presented at the 5th International Conference on Environmental Compliance and Enforcement. Monterey, California, November 1998.
Gould, Kenneth A., David N. Pellow and Allan Schnaiberg. 2004. 'Interrogating the Treadmill of Production: Everything You Wanted to Know about the Treadmill but Were Afraid to Ask.' *Organization & Environment*. 17 (3): 296–316.
Hansen, W., M. Christopher and M. Verbuecheln. 2002. 'EU Waste Policy and Challenges for Regional and Local Authorities.' Berlin: Ecologic Institute for International and European Environmental Policy. Retrieved 26 March 2007 (http://www.ecologic.de/download/projekte/1900-1949/1921-1922/1921-1922_background_paper_waste_en.PDF).
Hempen, S. 2005. 'History and Current Status of Waste Management in Germany.' Presentation at the conference on the Future of Residual Waste Management in Europe. Retrieved 27 February 2007 (http://www.orbit-online.net/orbit2005/vortraege/hempen-ppt.pdf).
ITAD (Interessengemeinschaft der Thermischen Abfallbehandlungsanlagen in Deutschland). 2004. *Country Report: Germany*. Confederation of European Waste-to-Energy Plants (CEWEP) Congress, Amsterdam, 7–8 September 2004. Retrieved 27 February 2007 (http://www.cewep.com/storage/med/media/creports/11_germany.pdf?fCMS=1b07ba11b1652b40175e088daf6dfbe9).
Klíma, Ivan. 1990. *Love and Garbage*. London: Vintage.
Massari, M. (ed.) 2003. 'Illegal Trafficking in Hazardous Waste in Italy and Spain: Final Report.' Legambiente: Rome. Retrieved 24 October 2007 (http://www.legambiente.eu/documenti/2004/0709_ecomafia_italia_spagna/ecomafia_italia_spagna_EN.pdf).
McCormick, J. 2001. *Environmental Policy in the European Union*. New York: Palgrave.
Netherlands Ministry of Housing, Spatial Planning and the Environment. 2005. *Illegal Waste Shipments in Europe*. The Hague: The Ministry of VROM.
OECD (Organization for Economic Cooperation and Development). 2004. *Addressing the Economics of Waste*. Paris: OECD.

Ram, P. J. [No date]. 'German Waste Exports.' Washington, DC: American University Trade & Environment Database Case Studies. Retrieved 3 March 2007 (http://www.american.edu/TED/germhaz.htm).

Roelofs, J. 2006. 'IMPEL Waste Transport Inspections: A Step towards European Enforcement.' Paper presented at the 16th Regional Workshop on Illegal Traffic, Bratislava, Slovakia, October 2006.

Royte, Elizabeth. 2005. *Garbageland: On the Secret Trail of Trash*. New York: Little, Brown & Co.

Schaschek, S. 2006. 'Waste Wars: Authorities Find German Firms Are Dumping Illegally.' *The Prague Post*. 22 February 2006.

Schnaiberg, Allan. 1980. *The Environment: From Surplus to Scarcity*. New York: Oxford University Press.

Schnaiberg, Allan and Kenneth Alan Gould. 1994. *Environment and Society: The Enduring Conflict*. New York: St. Martin's Press.

Schnaiberg, A., D. N. Pellow and A. S. Weinberg. 2002. 'The Treadmill of Production and the Environmental State.' Pp. 15-32 in *The Environmental State under Pressure*, edited by Arthur Mol and Fred Buttel. Kidington, Oxford, UK: Elsevier Publishing.

Scottish Parliament Information Centre. 2002. 'Waste Policy: An Overview.' Retrieved 9 March 2007 (http://www.scottish.parliament.uk/business/research/pdf_res_brief/sb02-25.pdf).

Weinberg, Adam S., David N. Pellow, and Allan Schnaiberg. 2000. *Urban Recycling and the Search for Sustainable Community Development*. Princeton, New Jersey: Princeton University Press.

Vail, Benjamin J. 2005. 'Czech Republic on an Environmental See-saw: Free Market Reforms Solve Some Environmental Problems, Cause Others.' *Times Record*. 15 June 2005.

Zegnál, J. 2006. 'EU Changing Rules on Waste Transportation.' *Czech Business Weekly*. 29 May 2006.

queen's gambit:
the launch of a research career

Barbora Tupá (ed.)

The book introduces readers to a selection of young women researchers in the early-stages of their careers. It looks at the lives and work of young women who have chosen an academic career, been successful in their efforts, and have managed to enter the world of science. The stories they tell about their journeys into their fields depict the process as natural; they are not stories about overcoming difficult obstacles and experiences of marginalisation. But that does not mean there have been no pitfalls along the road, and some of these are mentioned. The women also talk about their scientific and life role models, people close to them, and their successes. They talk about their work with such captivating animation that their words will appeal even to anyone who knows nothing about their individual fields, and readers must come away with the impression that these women are good role models for other students.

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Pieter Vanhuysse: *Divide and Pacify: Strategic Social Policies and Political Protests in Post-Communist Democracies*
Budapest 2006: CEU Press, 200 pp.

On Pieter Vanhuysse

In *Divide and Pacify: Strategic Social Policies and Political Protests in Post-Communist Democracies*, Pieter Vanhuysse employs an innovative and thought-provoking approach to explain the unexpectedly low level of disruptive political protests in early post-communist transition. He develops a creative interaction between the literature on 'the politics and sociology of contention' and the comparative political economy of welfare states (p. 2). The main puzzle that he addresses is the relative political quiescence that was present in early transition in the Czech Republic, Hungary, and Poland, especially when compared with similar transformations that took place in Latin America in the 1980s. Vanhuysse suggests that the theories in the literature cannot adequately explain the 'post-communist protest variation' (p. 29) and argues that greater emphasis should be given to the strategy of the state in transition, more specifically 'the strategic role of social policies in preempting the political danger posed by threatened workers' (p. 44). He attempts to explain this variation through the use of 'strategic social policies' that divided constituents into distinct work-welfare groups limiting their capacity for organised disruption in the reform process. Through a comparison of the three countries, he describes two distinct causal paths. In the Czech Republic, the strategy was to prevent major employment loss, while in Poland and Hungary strategic social policies were implemented to prevent the political consequences of major employment losses. Vanhuysse argues that strategic decisions made by the states in the early phases of transition caused there to be only limited political protests in these countries. Although his 'divide and pacify' theory offers an alternative or supplementary explanation for the relative political quiescence in some post-communist countries, the greatest contribution of this book is a systematic analysis of the significant political consequences of decisions made by states in early transition and the path dependence that emerged as a result of these decisions.

'The unexpected peacefulness of transitions'

Vanhuysse presents evidence that the conditions for mass political protest were present in early transition and there was reason to expect protests. He emphasises that existing theories (economic theory, theories based on neo-corporatism or political opportunity structures, and Greskovits' [1998] 'informal exit' theory) cannot adequately explain the surprisingly low level of protests in post-communist countries because they lack emphasis on the role of state strategies or do not explain the variance between post-communist countries. The economic theory cannot explain the absence of disruptive protests because the economic preconditions for protest were present, including high unemployment, significant reductions in real wages and overall economic well-being, and the continuation of costly reforms. In Poland and Hungary in particular, there were massive increases in official unemployment, which was previously unheard of in these economies and could have inspired threatened workers to protest (p. 39). General political dissatisfaction was expressed by consistently voting the incumbent out of office, which generally occurs when there are unsatisfactory economic conditions, but it did not lead to more disruptive forms of political expression.

Vanhuysse also argues that the necessary political opportunity structures were present (or could have been adapted to fulfil what was necessary), as there was rela-

tively high union density. But despite this purportedly high density, how effective these unions were after the transition began is questionable, given the challenges of significant necessary 're-branding' and the limited level of trust in unions. Finally, Vanhuysse recognises the significance of 'informal exit' for explaining the relative peacefulness in post-communist countries, as presented by Greskovits [1998]. But he argues that this factor cannot explain the variation in post-communist countries. Despite the presence of the conditions that would predict high levels of political unrest, strike rates and other measures of disruptive political protest were substantially lower in post-communist countries than in Latin America in the 1980s and even lower than in Western Europe in the 1990s (p. 19).

'Divide and pacify as political strategy'

Given that post-communist countries faced the 'challenge of simultaneously consolidating democracy and implementing costly market reforms', Vanhuysse argues that policy-makers were very conscious of the need to limit protest that could disrupt the needed reforms (p. 11). With the assumption that 'in the initial stages of the transition, governments attached a high priority to low levels of disruption in the polity, *whatever else* they wanted otherwise', Vanhuysse investigates the policy approaches that the states used to achieve relative political quiescence (p. 49). In Czech Republic the gradual restructuring of firms, the persistence of relatively 'soft budget constraints,' and active labour market spending, referred to as 'job loss avoidance policies', facilitated a limited increase in unemployment, which consequently limited political unrest (p. 124). In Hungary and Poland, social policy encouraged certain workers to exit the labour market through early retirement and disability benefit schemes, a group of people Vanhuysse refers to as 'abnormal' pensioners. This approach 'divided and pacified' groups that could otherwise have organised political protests. These divisions combined with general conflicts of interest managed to divide the population along lines that made disruptive protests unlikely.

There is generally a conflict of interests between workers and net welfare recipients, especially in the case where, for example, workers can be said to relatively directly finance the pensions or unemployment benefits. The emergence of significant numbers of abnormal pensioners created more dimensions in this distributional conflict. Workers were divided into groups characterised by three substantial work-welfare statuses: unemployed workers, employed workers, and abnormally retired people. The sum of these groups would have been expected to form the core of political protests, but they were divided in such a way that their interests conflicted (p. 54–55). The workers continued to have conflicting interests with the welfare recipients (unemployed workers and pensioners, both old-age and abnormal). But additionally the unemployed workers and the pensioners were in a 'distributional struggle for state resources' and therefore had conflicting interests (p. 91). Based on these divisions, large scale protests would have been much more difficult to organise, if they were to include people from more than one work-welfare status. Workers lost the critical mass and within the other work-welfare statuses, there were multiple reasons for not organising. Unemployed workers and pensioners lost many of the social networks that would be important for organising political protests and there is a high opportunity cost of protesting based on the need for activity in the informal economy to supplement the benefits received from the state. Furthermore, their relationship with the state 'became individualised and strongly dependent', and that decreased the incentives to protest (p. 64). In sum, divide and pacify as a polit-

ical strategy 'split up well-networked and formally organized groups of threatened workers with similar economic interests, by sending many of them onto unemployment benefits and many others onto early and disability pensions' (p. 67).

Policy decisions and path dependence

The idea to prevent disruptive political protest was politically rational and arguably socially beneficial. Vanhuysse assumes that policy-makers were aware of and could implement policies with the express aim of diffusing political protest that would disturb reforms. He writes, 'Pandora's boxes they may have been, but post-communist transitions also left considerable scope for rational government strategy' (p. 67). So policy-makers are assumed to have had rational strategies that they were able to pursue to meet economic and political objectives. As Vanhuysse compellingly argued, the way that threatened workers were divided by these policies does offer a reasonable explanation for the political quiescence. However, the extent to which this can be considered a conscious decision with such a planned outcome is questionable. There are multiple reasonable motivations that could have been behind policy-makers' decisions to use the 'abnormal' pension policies, such as to increase economic productivity by removing the most redundant workers from the labour force or to offer a social safety net to those that seemed to be most threatened by the transition. Therefore, while it is feasible that some form of rational state strategy did exist in the early phases of transition, this does not logically imply that policy-makers would pursue this strategy for the explicit purpose of limiting political protest. Perhaps political quiescence was an unintended outcome of a policy that was strategically decided on the basis of other predicted outcomes. This makes the argument of the intentionality of policy-makers difficult to justify, but the outlined effects of the 'abnormal' pension booms in the case for Hungary and Poland were quite convincing.

Apart from their intentionality, Vanhuysse argues that social policy decisions made in the early phases of the transition 'fundamentally reshaped the subsequent operational space of post-communist politics in the process' (p. 124). He presents the significant and long-lasting consequences of this policy choice in early transition. Therefore, the central claim of the book is that the decision to encourage 'abnormal' pensioners in Hungary and Poland, as well as the decision for gradual restructuring accompanied by active labour market spending in the Czech Republic, explain the limited disruptive political protests in these countries, but these decisions also launched the countries along specific trajectories (or 'pathways') that determine the political and economic challenges that these countries are currently facing.

The complexity of causality

Divide and Pacify offers a unique approach to understanding the complex actions that took place in post-communist transition which led to the absence of significant political protest. Although it would be unrealistic to expect a single factor to be necessary and sufficient for explaining the surprising political quiescence in post-communist countries, it is important to understand the interaction of the most significant factors. Vanhuysse makes a significant contribution towards this end by introducing the factor of 'strategic social policies,' which has not previously been analysed. He presents the 'supply-side policies', which includes the Czech approach to restructuring and active labour market policies *and* the abnormal pension approach in Hungary and Poland, as the factors for explaining the peaceful transition (p. 124). However, it seems that this explanatory factor actually has two separate causal paths: one for

Hungary and Poland and another one for the Czech Republic. These could be viewed as two separate causal chains leading to the same outcome. 'Strategic social policies' are not necessary for preventing disruptive political protests, a point demonstrated by the Czech Republic, which followed a different method.

Given that there were many post-communist countries that exhibited this same outcome of political quiescence, based on the argument of the book, it is not clear what should be expected in post-communist countries that were not included in this analysis. By including more countries, more possible causal paths would most likely arise, which begs the question: what determines the causal path that a country ends up on? While Vanhuysse made convincing arguments for path dependence with the consistent outcome of relative political quiescence, there are very different medium- and long-term effects associated with each path (such as the high fiscal burden of paying for the abnormal pensioners). Therefore, not all paths are equal along other dimensions, and it is unclear if all possible paths would be open to all post-communist countries.

Another stated aim of the book was to explain the variation between post-communist countries. However, this variation was not clearly explained by the theory proposed. While the point was effectively made that overall political protest was significantly less in post-communist countries compared with other parts of the world, it was not clear that the variance between the post-communist countries was significant. Moreover, Vanhuysse's theory seems much more effective at explaining the overall low level of disruptive political protest based on 'strategic social policy' than it is at explaining why it was slightly higher in Poland than in Hungary.

Despite the challenges that are present when explaining outcomes that have complex causal paths, Vanhuysse made significant contributions to literature and policy-making by demonstrating the diverse and significant political, economic, and social effects of a policy decision made in early transition. His argument demonstrates the far-reaching effects of a seemingly limited social policy. He developed the concept of 'abnormal' pensions and described its important effects in the past and future. This reveals new perspectives on how decision-making in social policy may have effects in all areas of life — political, economic, and social — and presents the importance of thorough planning when making social policy decisions, as it has the potential to determine much of a country's future trajectory.

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Notes

[1] Ideas developed in this review benefited greatly from active discussion of this text in Dorothee Bohle's 'Politics of Labor in Europe' course in the Political Science Department at the Central European University in Budapest.

References

Greskovits, Béla. 1998. *The Political Economy of Protest and Patience: East European and Latin American Transformations Compared.* Budapest, New York: Central European University Press.

Charles Tilly: *Regimes and Repertoires*
Chicago 2006: The University of Chicago Press, 240 pp.

The means by which people make claims on their governments (i.e. their 'repertoires of contention') have long been an important tool for expressing the interests of a collectivity and advancing their claims. During the past several decades, there has been a rapid increase in the amount of scholarly research on repertoires of contention. Numerous works have been written on the

subject, and the term is now used in various theories and at all levels of analysis. However, upon observation it is evident that contentious repertoires vary dramatically from one type of regime to another (p. 210), and this raises the question of how regimes and repertoires of contention relate to each other. In *Regimes and Repertoires*, Charles Tilly masterfully takes up the challenge of examining this issue by carefully analysing the interplay between political regimes and contentious politics.

Regimes shape the timing of contentious repertoires and their character; for example, whether they will be moderate or violent, disruptive or non-disruptive, legal or illegal. Regimes not only influence the decision to become politically active but also determine the degree of political activism. The regime of a given society at a given time may be open to contentious repertoires or may be an obstacle to them, that is, hostile towards and discouraging of political participation. A regime may also limit an individual's ability to be active through conventional channels, thus making them choose a more radical or unconventional form of activity in order to achieve their goals.

Studies have typically focused on each aspect separately. Yet, as Tilly modestly notes, regimes and repertoires ‚deserve' their own vehicle (p. vii). Accordingly, the central theme of this book is the interaction between regimes and repertories. The book looks at three key questions: How do certain political regimes vary and change? How do the people living in various types of regimes make claims on each other and on their governments? What connections exist between regime change and the character of contentious politics? (p. 4)

In order to answer these questions, Tilly puts forth an interesting theoretical framework that offers a riveting review of different types of regimes and the various modes of repertoires which they encourage. According to Tilly, 'tracing causal connections between regimes and repertoires requires a serious historical and comparative effort' (p. 59). He consequently presents the story of how changes in regimes interact with and relate to repertoires, drawing on examples from various areas around the world (for example, Peru, India, Rwanda, South Africa, Uganda, Morrocco, Jamaica, Angola, Chechnya, and Kosovo). The wide variety of interesting cases, examples, and diagrams helps the reader to understand the phenomenon under examination and its multifaceted nature by addressing it from an explicitly comparative perspective. More importantly, Tilly relates each of the historical events to the study of conceptual and theoretical issues. Tilly's talent for shifting between times and places makes this book coherent and readable. Moreover, the author invites the reader to be part of the journey, even though some cases took place many years ago or in remote places.

The book begins with an excellent description and classification approach to the terms ‚regime' (Chapter 1), ‚how regimes work', (Chapter 2), and ‚repertoires of contention' (Chapter 3). In this first stage, Tilly's approach is relatively static, creating 'two rough conceptual maps – one of regimes, the other of contentious politics' (p. 16). Only after Tilly has mapped each component in this two-sided equation separately does he proceed to combine both aspects (Chapter 4 – ‚repertoires, meet regimes'). Tilly searches for the causes that connect regimes and repertoires – 'ways that regimes shape repertoires, ways that repertoires shape regimes' (p. 16). It is important to note, however, that the book puts greater emphasis on how change and variation in regimes shape contentious politics than vice versa.

Tilly's analytical tool for examining the connection between these two aspects (i.e. regimes and contentious politics) appears in the form of a two-dimensional space: 'government capacity', the

extent to which governmental agents control resources, activities, and people within government jurisdiction; and 'democracy', the extent to which individuals have equal rights and protection from arbitrary governmental action (p. 21). The horizontal dimension of this matrix represents democracy or non-democracy, while the vertical dimension represents governmental capacity (either high or low). Tilly's basic and very simple argument is that the location of a regime within the capacity-democracy space strongly affects its government's approach to contentious politics (p. 211). In other words, change and variation in governmental capacity or in democracy cause change and variation in the character of contentious repertoires.

The next chapter moves on to examine 'trajectories of change' (Chapter 5), explaining how changes in regimes interact with changes in the forms of contentious politics and, more importantly, what explains these changes. Interestingly, in this chapter Tilly discusses the apartheid regime in South Africa and illustrates how different actors make claims on each other and on their governments, and how they try to force change. This case study dramatically brings to light the influence of previously existing political institutions on the forms and outcomes of contention (p. 110).

The book then examines the model's implications for three contentious processes: 'collective violence' (Chapter 6), 'revolutions' (Chapter 7), and 'social movements' (Chapter 8). Tilly unsurprisingly reveals that 'the public politics of high-capacity, democratic regimes brings together widespread collective claim-making.....and impressively restrained domestic use of the governments enormous coercive power... Less democratic and lower-capacity regimes experience more authoritarian and/or more violent forms of contentious politics' (p. 150). Yet, violent repertoires differ sharply not only from one type of regime to another (i.e. democracy versus non-democracy), but rather between high-capacity and low-capacity non-democratic governments. For instance, while civil wars concentrate in low-capacity, non-democratic regimes, successful revolutions concentrate in (relatively) high-capacity, non-democratic regimes (p. 210). The 'concluding chapter' (Chapter 9) is organised in a manner that allows the author to clarify all the theoretical issues raised throughout the book.

The strength of the book lies in the simple and yet very effective theoretical framework it applies to the questions of regimes and repertoires. Tilly has once again proven to be an author of impressive skill, using a theoretical framework and various historical cases to stimulate every reader to think and comprehend beyond a factual level. Although part of this book is an adaptation of materials from Tilly's previous works, the texts have been significantly updated.

In our complex world, regimes and repertoires interact. Readers who wish to learn about the trajectories and characteristics of this interconnected process will find this book highly useful. This is undoubtedly an important, well-written book, rich in detail, which raises an important theoretical and practical issue. Its readability makes it useful for both undergraduate and graduate students. It is an essential addition to the private libraries of scholars interested in contentious politics (and collective action). Nevertheless, those who are taking their first steps into this field of interest and wish to broaden their knowledge will miss the in-depth character and intricacies of a focused one-dimensional analysis. Anyone interested in understanding contentious politics can therefore use this wide-ranging work together with a deeper, more penetrating analysis in order to obtain a complete picture of this issue.

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Thomas Janoski, Robert R. Alford, Alexander Hicks, Mildred A. Schwartz (eds.): *The Handbook of Political Sociology: States, Civil Societies, and Globalization*
Cambridge 2005: Cambridge University Press, xxi+815 pp.

The *Handbook of Political Sociology* represents the first truly comprehensive survey of the history and current state of a little-unified but often very vibrant discipline. Clocking in at just over eight hundred pages, this masterful collection is packed with thirty-two unfailingly competent and often singularly authoritative chapters, written by the likes of Charles Tilly, Gøsta Esping-Andersen, Peter Evans, John Stephens, Frances Fox Piven, and many others. Each chapter provides a detailed analysis of the role of the state – its formation, transitions and regime structure – in its particular approach or sub-discipline. Dedicated to the memory of the late Robert Alford, the *Handbook* opens with a brief introduction by the three other editors sketching the major contours and challenges (culture –postmodernity- and rational choice). This is followed by three main parts.

Part 1, 'Theories of Political Sociology', consists of nine chapters on such topics as rule-making, rule-breaking, and power (by Frances Fox Piven and Richard A. Crawford), neo-pluralism and neo-functionalism (by Hicks and Frank Lechner), conflict theories (by Axel van den Berg and Janoski), institutionalist and state-centric theories (by Edwin Amenta), culture, knowledge, and politics (by James Jasper), feminism (by Barbara Hobson), linguistic approaches (by Jacob Torfing), rational choice theories (by Edgar Kiser and Shawn Bauldry), and theories of race and the state (by David R. James and Kent Redding). The chapter by Piven and Cloward rightly sets the tone here. The starting assumption is that rule-breaking is a strategy to contest, challenge or break domination, just as rule-making is a strategy of domination and that the reasons for rule-breaking – and the choice of rules broken – can usefully illuminate the notion of power in social life. Piven and Cloward review a rich array of definitions of power, from Hobbes and Aristotle, to Weber and Russell, up to Dahl, Giddens, Wrong, Lukes, and Tilly. They argue that a distributional focus on 'powerful resources lists' (money, status, skills, and the like) cannot always sufficiently explain political challenges from below. Nevertheless, people poor in those resources, or with a low status in the social hierarchy, frequently attempt (and intermittently succeed) to exercise power, and most often they do so by breaking existing rules. According to Piven and Cloward, the source of this 'poor people's power' lies in the inherent interdependence, or interwovenness, of everyday social life: ‚Because cooperative and interdependent social relations are by definition reciprocal, so is the potential for the exercise of power' (p. 39). Piven and Cloward insightfully discuss the prerequisites for the translation of this potential into actual power, and they review a range of historical examples of both rule-making and rule-breaking. In so doing, they amply illustrate the potential for this particular view of power in political sociology, and set a high standard for the rest of the *Handbook*.

Part 2 discusses civil society, viewing it as 'The Roots and Processes of Political Action': It includes contributions on money, social cleavages, and electoral politics (by Jeffrey Manza, Clem Brooks and Michael Sauder), public opinion, political attitudes, and ideology (by David Weakliem), comparative perspectives on nationalism (by Liah Greenfield), the social bases, organisation, and environment of political parties (by Mildred Schwartz and Kay Lawson), organised interest groups and policy networks (by Francisco Granados and David Knoke), corporate control, inter-firm relations, and corporate power (by Mark Mizruchi and Deborah Bey), social

movement organisations and strategies (by J. Craig Jenkins and William Form), and the news media.

Part 3 of the *Handbook* is titled 'The State and Its Manifestations'. It discusses state formation and state-building in Europe (Thomas Ertman), transitions to democracy (John Markoff), the incidence and consequences of social revolutions (Jeff Goodwin), regimes and contention (Charles Tilly), theories and practices of new-corporatism (Wolfgang Streeck and Lane Kentworthy), undemocratic politics (Viviane Brachet-Marquez), and civil bureaucracies in politics and implementing policies (Oskar Ozlak). Markoff's chapter merits singling out for its lucid structure and concise overview of all the major issues of the topic, captured under headings such as 'starting points', 'end points' and 'paths', 'conceptual, theoretical and methodological issues', and so on. Inexplicably, however, post-communist transitions are conspicuous in their near total absence.

Part 4, 'State Policy and Innovations', with just four chapters, is shorter. It discusses comparative and historical studies of social policy and the welfare state (Alexander Hicks and Gøsta Esping-Andersen), women, gender, and state policies (Joya Misra and Leslie King), racial policy (Kent Redding, David James, and Joshua Klugman), and war, militarism, and states (Gregory Hooks and James Rice).

Finally, Part 5 on 'Globalization' provides an overview of political sociology on globalisation in general (Philip McMichael) and of related issues in economic and social policy in global capitalism (Evelyne Huber and John Stephens), immigration and national integration (Janoski and Fengjan Wang), and counter-hegemonic globalisation via transnational social movements in the contemporary global political economy (Peter Evans). The two chapters on social policy, co-authored by two of the undisputed leaders of the field, provide particularly competent overviews of the often contested (or at least ambiguous) roles of globalisation, liberalisation, and retrenchment regarding this crucial area of state involvement, along with the major regime typologies and causal theories. But even though both Esping-Andersen and Stephens have recently started tackling these issues themselves in particularly innovative ways, their chapters here pay too little attention to what could be deemed 'preventive social policies'. This includes topics that are key to understanding the political sociology of today's and tomorrow's knowledge economy, such as new approaches to human capital investment and early childhood education, social policies aimed at boosting family formation, family stability and (indirectly) cognitive skills, behavioural traits in children and labour market entrants, and what is arguably the most influential new welfare state theory of the last few years — the theory of asset-specific skills protection put forth by Torben Iversen and David Soskice (for a short review of these approaches, see Vanhuysse [2008]).

Perhaps inevitably, given the daunting range of topics that could be usefully tackled from a political-sociology perspective, some important political-sociology topics and developments are missing from this *Handbook* or are underdeveloped in its pages. For instance, substantively, the political-sociology aspects of education across different institutional settings seem worthy of a separate chapter – for example, on education financing, or on the use of education by states from the perspective of curriculum development, immigrant absorption, and nation building (e.g. Torres and Antikkainen 2003), and human capital and labour force enhancement (e.g. Vanhuysse 2008). Similarly, the part on 'State Policy and Innovations' would have been even stronger had there been a more systematic discussion of the issues that are becoming increasingly crucial in contemporary social life, such as religious fundamentalism, the role of the state in the knowledge economy,

and the manifold influences of the internet and other forms of technological progress on social and political life. Geographically, developing regions such as Latin America receive considerable attention, but the many comparative chapters, including those on democratic transitions and welfare states, ought to have paid much more attention to the empirical and theoretical place of East Central Europe within political sociology. This may partly be due to the fact that not one of the contributors in this overwhelmingly American-dominated *Handbook* originates from East Central Europe or is based there.

Related to this, this *Handbook on Political Sociology* does not always explore to the fullest the quite considerable overlaps with sister disciplines tackling very similar topics to those covered here, most notably economic sociology and political economy. To give but three examples, the chapters by Kiser and Bauldry on rational choice, by Streeck and Kenworthy on neo-corporatism, and by Hicks and Esping-Andersen and Huber and Stephens on state policy could equally well have fit into authoritative sister volumes, such as Barry Weingast and Donald Wittman's [2006] *Oxford Handbook of Political Economy* or, still more so, Neil Smelser and Richard Swedberg's [2005] second edition of their *Handbook of Economic Sociology*. Indeed, Esping-Andersen's contribution to the first [1994] edition of the latter *Handbook* and Streeck's, Kiser's, and Huber and Stephens's contributions to its second [2005] edition exhibit remarkably close overlaps with these authors' respective contributions to the present volume. This raises the question of whether we are currently witnessing an increasing convergence of, at least, these three social science disciplines (political economy, political sociology, and economic sociology) in terms of topics studied, methods employed, behavioural assumptions, and substantive theoretical propositions. That said, I hasten to emphasise that this *Handbook of Political Sociology* is a definitive must-read for virtually any political sociologist, political economist, and economic sociologist. Practitioners of related disciplines interested in the role of the state are similarly likely to benefit from this truly impressive survey of a theoretically exciting and fast-changing discipline.

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References

Smelser, Neil and Richard Swedberg. (eds.) 2005. *The Handbook of Economic Sociology*, second edition. New Jersey: Russell Sage Foundation.

Torres, Carlos Alberto and Ari Antikainened. (eds.) 2003. *The International Handbook on the Sociology of Education*. Lanham: Rowman and Littlefield.

Vanhuysse, Pieter. 2008. 'Review Article: The New Political Economy of Skill Formation.' *Public Administration Review* 67: forthcoming.

Weingast, Barry and Donald Wittman. (eds.) 2006. *The Oxford Handbook of Political Economy*. Oxford: Oxford University Press.

The RC28 Spring Meeting in Brno, 24–27 May 2007

The Spring Meeting of the International Sociological Association's Research Committee 28 (RC 28),[1] held May 24–27 at Masaryk University in Brno, was arguably the most significant sociology conference to take place in the Czech Republic this year. Organised by Petr Matějů, the Spring Meeting was jointly hosted by the Institute of Sociology of the Academy of Sciences of the Czech Republic and by Masaryk University in Brno. For RC28, the leading international research community on social stratification and mobility, the Spring Meeting represented its largest conference in its gloried 57-year history.[2] With 31 of the 151 participants coming from North American universities, 12 from Asia, 16 from the Middle East and South America, and with the representation of 13 different European countries, the Spring Meeting also reflected the growing interest in, and global scope of, stratification and mobility research generally.

To understand the significance and contributions of the Spring Meeting, it is useful to dive into the history of RC28 itself. What is now called RC28 was originally founded as a research community in 1950 by Theodor Geiger, David Glass, and other sociologists, with the aim of standardising data and methods of analysing social mobility in order to make reliable cross-national comparisons of mobility rates. Since then, the research committee's collaborative work has greatly expanded, in part due to the success of the CASMIN project and the University of Wisconsin-based longitudinal studies on status attainment. RC28 members have produced some of the most significant findings in the field of social stratification (and perhaps in sociology overall) during the past half century. In their overview of RC28's main achievements, Hout and DiPrete (2004) listed twenty major empirical generalisations by RC28 members that have withstood the test of time, ranging from the Treiman constant (the commonality of occupational rank orders across societies), education as the main motor of the inter-generational reproduction of status, to the universality of occupational gender segregation.

The ability of research by RC28 members to advance by building on prior scientific findings was significantly aided by the frequent meetings and the character of the research committee. As Hout and DiPrete explain,

> 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 endeavour. The debates and multiple sessions no doubt tried the patience of some RC members... 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. (p. 10–11)

Thus RC28 has been able to develop a large range of empirical generalisations through the culture of its biannual meetings and its commitment to assessing scientific claims by subjecting findings to a broader array of countries, surveys, and statistical tests. As one long-term RC28 member explained to me, whenever someone in the past 'would challenge the findings of a presenter at a RC28 meeting, the presenter would run a new analysis right in front of the audience to determine who was right'. While these narratives about RC28's history may be a bit idealistic, they do point to the key elements nurtured by RC28 that are important for the advancement of sociological knowledge.

The 116 papers presented at the Spring Meeting, spanning 29 panels in 9 main sessions, represented most areas of stratification research. Not surprisingly, over a third of all the papers focused on educational inequality in one way or the other. One of the most ambitious contributions was by Jeroen Smits (Radboud University), who presented a multilevel analysis of the determinants of primary school enrolment in 75, mostly undeveloped, countries, measuring, for example, how competition between siblings or the absence of a parent reduces children's chances of going to school. While Smits' paper reflected the goal of some RC28 members to make empirical generalisations through large-scale cross-country comparisons, Anna Zimdars' (Oxford) paper represented the opposite extreme. Through a case study of university admissions at Oxford, her paper sought to contribute to the RC28 literature on educational inequality in university admissions by focusing on the key role of university 'gatekeepers' – which for obvious reasons cannot be easily measured through large-scale comparisons – in identifying and accepting university applicants from more privileged backgrounds. The two poles of research exemplified by these papers reflect the importance of diverse methods and approaches to the study of educational inequality that were embodied by the other papers at the Spring Meeting.

The large size of the Spring Meeting made it possible for a number of papers to be presented that expanded or challenged the limits of what may be considered stratification research. The Spring Meeting saw, for example, an interesting confrontation between David Grusky (Stanford University) and Harry Ganzeboom (Vrije Universiteit Amsterdam) over the relevance of 'low' versus 'high culture' models of lifestyle attainment. Another exciting paper that broadened the scope of stratification research was Glenn Firebaugh's (Penn State University) presentation of his collaborative research on the use of census tracts to measure racial segregation in the United States. Since the measurement of a minority's geographic segregation depends on the geographic scope of the measurement used, Firebaugh questioned the validity of measuring segregation through census tracts, which can vary greatly in size and with which it is impossible to measure the relationship between people in neighbouring tracts. He instead proposed a new measurement of segregation that takes each individual as the centre of his or her local environment, the latter being the distance or radius of the individual to a wide set of geographic scales; 'segregation' is then defined and measured as the average degree to which individual local environments differ from the overall composition of a city.

While Firebaugh began and concluded his presentation by insisting that research can be an important contribution to the goals of RC28, in a sense he stated the obvious. Housing conditions and segregation are fundamental to the study of individual well-being and the transmission of social inequality. Claudia Solari's (UCLA) presentation on the effects of crowded housing on children's well-being is exemplary in this regard, as she used two different surveys to demonstrate the large negative impact of crowded housing on the cognitive, behavioural, and health conditions of children. Based on the quality of her paper, Solari was one of the six participants to receive the RC28 Travel Award to help cover the costs of coming to the Spring Meeting. The other recipients of the Travel Award were Alfred Essuman (University of Trondheim), who presented a paper on educational inequalities in Ghana; Megan Andrew (University of Wisconsin-Madison), who presented two highly acclaimed papers on functional form and educational transitions; Kasia Karpinska (Utrecht University), who presented her research on self-employment in post-communist soci-

eties; Bongoh Kye (UCLA), whose paper focused on the literacy gap among older adults in 20 countries; and Eyal Bar-Haim (Tel-Aviv University), who was the co-author of the paper 'The Persistence of Persistent Inequality', presented by Yossi Shavit (Tel-Aviv University) in the plenary session.

There are perhaps two reasons why the Spring Meeting was as large and diverse as it was. The first reason is simply the sheer number of abstract submissions received – nearly 200 in total – making acceptance to the Spring Meeting highly competitive, even despite its size. Second, the organisers of the Spring Meeting were committed to ensuring the presence of doctoral candidates and young scholars at the conference. If RC28 is to develop as a research community over time, it must engage and bring in talented young scholars at its meetings. After witnessing the large volume of abstracts received, the organisers sought to ensure a degree of inclusiveness by developing a special poster session for junior scholars. As preparations for the meeting progressed, it was possible to change the poster session into a 'Young Scholars Panel' in which 11 authors and co-authors were able to present their full papers. The panel turned out to be a great success, measured by the size of the audience it attracted. The panel was also a showcase for the work of Czech sociologists: Tomáš Katrňák (Masaryk University) presented a well-received paper on age and educational homogeny in the Czech Republic; Natalie Simonová and Petr Soukup (Academy of Sciences of the Czech Republic) presented their research on the determinants of the reproduction of Czech educational inequalities; Iva Šmídová and Klára Janoušková (Masaryk University and Ostrava University) presented a paper on the effect of gender-based features of the Czech educational system on pupils' aspirations; and Josef Basl (Academy of Sciences of the Czech Republic) presented a study of the determinants of computer literacy among fifteen-year old Czech pupils.

One of the exciting aspects of the Spring Meeting was the sheer number of 'big names' in stratification research in attendance, such as Richard Breen (Yale), Walter Mueller (University of Mannheim), Donald Treiman (UCLA), Wout Ultee (Radboud University), Michael Hout (UC-Berkeley), and many others. This was particularly important given that the research of leading scholars often served as the starting point for many of the presentations. For example, research by Robert Mare (UCLA), who is the current President of RC28, was the fulcrum of a number of discussions, particularly his article on how historical differences in the distribution of education (educational expansion) impact inequality in educational attainment (Mare 1981). For example, Maarten Buis' (Vrije Universiteit Amsterdam) paper on the effects of educational expansion in the Netherlands between 1906 and 1990 provided a reinterpretation of Mare's analysis of how the effect of social origin on the highest level of education attained relates to the effect of social origin on specific educational transitions. The intensive discussions among such scholars made the Spring Meeting especially lively and will hopefully have a material impact on future research.

Another highlight of the Spring Meeting was the debate surrounding Stein Ringen's (Oxford) paper on 'The Truth about Class Inequality' presented in the plenary session (published as Ringen 2006), which was followed up by a special discussion panel composed of Michael Hout (UC-Berkeley), John Logan (University of Wisconsin-Madison), and Samuel Lucas (UC-Berkeley). The main goal of Ringen's paper was to challenge the 'stability thesis' (Goldthorpe et al. 1980) – the idea that despite major increases in social mobility, class inequalities have remained largely constant in the long run – and thus also the

implications of the stability thesis on how we understand the effectiveness of welfare-state policies. Ringen's critique centred on the methodological basis of that thesis: changes in inequality are measured in terms of changes in the conditional associations, net of the effects of marginal distributions, of class-by-education relationships in social mobility tables. To Ringen, such an 'odds-ratio reading' of inequality masks 'certain changes in inequality because they are changes that have a certain cause, in this case changes in inequality which result directly from changes in the social structure' as measured by the marginal distributions (Ringen 2006: 479). Ringen's collaborator, Ottar Hellevik (University of Oslo), also presented a paper at the Spring Meeting – now published in this journal – defending the same position. As illustrated in Table 1 of his article, Hellevik argued that even though loglinear associations between class and educational attainment in British data show stability in inequality across cohorts, gini-coefficient measures of inequality reveal marked declines in class inequality over time. Both Ringen and Hellevik questioned the meaningfulness of loglinear associations as measures of class inequality and the kinds of inferences that can be drawn from those associations.

Not surprisingly, Ringen's paper faced a significant degree of criticism in the discussion panel devoted to it at the Spring Meeting. The presentation by Michael Hout (UC-Berkeley) and Robert Hauser (University of Wisconsin-Madison; not in attendance) was particularly critical. First, Hout charged Ringen for misinterpreting the scholarly acceptance of the stability thesis, as numerous studies by stratification researchers (e.g. Featherman and Hauser 1978; Breen and Jonsson 2005) also found significant cross-national or historical variation in the odds-ratio data. Second, while Hout substantively agreed with Ringen on dismissing the stability thesis, he defended the use of methods based on odds-ratios for a number of reasons, particularly the ability of loglinear models to separate out structural mobility from that due to persistence, as well as the falsifiability and parsimony of the models. Further, both Hout and Lucas criticised Ringen for his reliance on Gini-coefficients as measures of inequality, as Gini indexes require a complete ordering of classes (which may not be possible) while loglinear methods do not. While it seemed that the debate led to few conclusions, the fact of the matter is that both Ringen and his critics reached a consensus on dismissing the stability thesis once and for all.

In conclusion, what can the Spring Meeting teach us about current stratification research? I was particularly struck by three things. First, despite the high level of methodological sophistication of many of the papers, I was surprised that some scholars sought to draw out the policy implications of their work. Robert Mare stressed in his plenary address that RC28 researchers have always been inspired, in different ways, by real social problems. But the presenters could have given more attention to those social problems and the kinds of policy responses their research implies. Given the large number of empirical generalisations that scholars see RC28 as having achieved, it seems that the next major step for RC28 is to better translate technical analyses of stratification, inequality, and mobility into usable educational and social policies.

Second, while there were roughly a dozen or so sociologists from Central and Eastern Europe who presented papers, it was hard not to notice their relative absence at the Spring Meeting, particularly in terms of the discussions after the presentations. It seemed that many of the presentations by the 'Western' sociologists were much more methodological and model-driven than what sociologists from this region prefer or are used to. Given the large number of prominent scholars in attend-

ance, it was also disappointing that more students from Masaryk University did not hang around and listen in on presentations. While I would not make too much of East-West differences, the Spring Meeting did give a sense of how difficult it is for young scholars from non-Western universities to break into the RC28 club.

Finally, I was impressed by how much the Spring Meeting forged a community of learning. It often seems at academic conferences that participants care little about the other panels and presentations. The Spring Meeting, on the other hand, gave the impression that participants primarily came to listen to each other, collaborate, and learn. While there were of course participants who might have skipped a session in order to wander around Brno, many of the panels, and even the Young Scholars Panel on Sunday afternoon, had full audiences and engaging discussions. In terms of the overall goal of the RC28 meetings to provide a forum for advancing stratification research, the Spring Meeting can only be regarded as a success.

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Bibliography

References to Paper presentations at the Spring Meeting (papers and presentations available online can be accessed on the Spring Meeting website at http://www.soc.cas.cz/rc28/):

Andrew, Megan and Cecilia Ceja, 'Path Dependence in Post-Secondary Persistence: A Multi-State Model of Education Transition in the U.S., 1982–2000.'

Basl, Josef, 'Computer Literacy in the Context of Social Exclusion and Digital Divide: Czech Republic in an International Perspective.' (*paper available online*)

MBuis, Maarten, 'Not All Transitions are Equal: The Effect of Educational Expansion and the Decreased Disadvantaged Position of Women in Education on Educational Inequality in the Netherlands between 1906 and 1990.' (*paper available online*)

Essuman, Alfred A. and Kristen Ringdal, 'A multilevel Analysis of Rural-urban Inequalities in Basic Education in Ghana.' (*paper available online*)

Firebaugh, Glenn, 'Beyond the Consensus Tract: Methods for Studying the Geographic Scale of Metropolitan Racial Segregation.' (*presentation available online*)

Grusky David, and Ivalyo D. Petev, 'How Many Lifestyles Are There?'

Ganzeboom, Harry and Ineke Nagel, 'Cultural Participation among Ethnic Minority and Native Majority Adolescents and their Parents in the Netherlands.' (*paper available online*)

Hout, Michael and Robert M. Hauser, 'Comments on Ringen.'

Karpinska, Kasia, Ineke Maas and Wim Jansen, 'Self-employment in Structural Change: A Cross-country Comparison of Post-communist Economies.' (*paper available online*)

Katrňák, Tomáš, 'Does Age Homogamy Influence Educational Homogamy? The Case of the Czech Republic, 1994–2004.'

Kye, Bongoh, 'Internal Labor Markets and the Effects of Structural Change: Job Mobility in Korean Labor Markets in 1998–2000.'

Shavit, Yossi, Meir Yaish and Eyal-Bar-Haim, 'The Persistence of Persistent Inequality.' (*presentation available online*)

Simonová, Natalie and Petr Soukup, 'The Determinants of Educational Inequalities Reproduction in the Czech Republic after 1989.'

Šmídová, Iva and Klára Janoušková, 'Factors Conditioning Educational Aspirations and Educational Segregation for Girls and Boys in the Czech Educational System.' (*paper available online*)

Smits, Jeroen, 'Effects of Factors at the Family Level, District Level and National Level on Primary School Enrolment in 75 Developing Countries.'

Solari, Claudia D. and Robert D. Mare, 'Housing Crowding Effects on Children's Wellbeing? National and Longitudinal Comparisons.' (*paper available online*)

Zimdars, Anna, 'Education, Education, Education and the British Elite University: Towards a New Framework of Understanding Social Reproduction at the University Gate.' (*paper available online*)

Other references

Breen, Richard and Jan O. Jonsson. 2005. 'Inequality of Opportunity in Comparative Per-

spective: Recent Research on Educational Attainment and Social Mobility.' *Annual Review of Sociology* 31: 223–244.

Featherman, David L. and Robert M. Hauser. 1978. *Opportunity and Change*. New York: Academic Press.

Goldthorpe, John H., Catriona Llewellyn and Clive Payne. 1980. *Social Mobility and Class Structure in Modern Britain*. Oxford: Clarendon Press.

Hellevik, Ottar. 2007. '"Margin Insensitivity" and the Analysis of Educational Inequality.' *Sociologický časopis/Czech Sociological Review* 43 (6): 1095–1119.

Hout, Michael and Thomas A. DiPrete. 2004. *What We Have Learned: RC28's Contributions to Knowledge about Social Stratification*. Working Paper. Retrieved 16 March 2007. (http://www.soc.duke.edu/~tdiprete/web/Hout&DiPrete_July12.pdf).

Mare, Robert D. 1981. 'Change and Stability in Educational Stratification.' *American Sociological Review* 46 (1): 72–87.

Ringen, Stein. 2006. 'The Truth about Class Inequality.' *Czech Sociological Review* 42 (3): 475–491.

Notes

[1] The website of the Spring Meeting is at http://www.soc.cas.cz/rc28/. Many of the papers presented at the conference are available on the website for download

For an overview of some of the more recent RC28 meetings, see the new RC28 website at http://hevra.haifa.ac.il/rc28/.

Report on the Media and Politics Conference – Izmir, Turkey, November 2007

On 15–17 November 2007 the Turkish city of Izmir hosted an international conference on Media and Politics, organised by Ege University, one of three local state universities. The objective of this gathering of social scientists from three continents was to examine the relationship between the spheres of the media and politics in twenty conference sessions that offered a faithful reflection of the prevailing trends in media studies at the turn of the millennium and, more narrowly, those aspects of them that relate to the connection between the media and politics or, if you will, to the way one sphere influences the other. The papers presented at the conference looked at its subject matter from various geographic (e.g. local media-local politics, global media-global politics), empirical (e.g. content analysis, discourse analysis), and paradigmatic (e.g. political economy, gender studies) perspectives.

As representatives of the host city it was Turkish political delegates who opened the conference. The tone of the Opening Session was signalled when the national anthem was played to the accompaniment of a short film that could best be described as propagandist, with shots of the Turkish flag against a background of black-and-white scenes from the life and battles of the Turkish army. Opposition politicians, in somewhat emotive speeches, drew attention mainly to the threat of censorship from the ruling AKP (Party of Justice and Development) and criticised the work of specific media and journalists. In this connection demands were aired on the podium that the Turkish media behave with greater responsibility and that journalists be required to members of a united professional organisation. The papers presented by political representatives tabled the question of whether perhaps the conference ought not to be called 'Media in Politics' instead of 'Media and Politics'. Individual speakers assigned the media a role in society that they then evaluated positively or negatively in accordance with whether they were a member of an opposition or government party. However, in either case the perception of the media was regarded in a limited or even short-sighted manner as primarily a tool in the political contest.

The keynote speakers at the conference were Denis McQuail (professor emeritus, University of Amsterdam), Ralph Negrine

(University Of Sheffield, UK), and Alexis Heraclides (Panteion University, Greece). McQuail [see e.g. McQuail 1992, 1994, 1997, 2003, 2005; Graber, Norris and McQuail 1998; Blumler and McQuail 1968], one of the best-known scholars in media studies, presented a paper on 'Media and Politics: The Role of Research', which confirmed him as a representative of the field's normative stream. He suggested that the developing field of political communication research has made a useful contribution to the development of a normative framework for considering the larger role of media in society. He based this, however, on a larger unwritten theory concerning the social role of the media, and he put forth the main content of the hypothetical theory in terms of the following propositions: 1) The media system as a whole should make available a range of channels and platforms open to diverse political and other relevant voices in the society in terms of access that are fair and equable; 2) The media, in addition to the above, need to uphold certain standards of content quality in their own contributions to the democratic political process; 3) The media should offer their own independent information, comment, and assessments on current political events, issues, candidates and campaigns; 4) The communication strategies and performance of political actors should also observe certain standards.

In a paper titled 'Politics and Political Communication in the Networked Society' Ralf Negrine [see, e.g., Negrine 1989, 1996, 1998] spoke about the growing role of the internet in political communication and referred directly to the 'networked communication of politics' as a sort of political communication immersed in ongoing historical and political debates. In a speech he noted that the potential of the internet can alter the way in which we think about political communication and can make the public aware of the need to consider how political groups use the internet to spread their messages in an unmediated way, bypassing traditional media but also adding to what is out there.

Alexis Heraclides, a speaker from Greece, mainly criticised the Greek-Turkish animosity and the way it is reflected in the media in both countries, but somewhat unfortunately, and without relevant arguments, he assigned greater responsibility for this situation and a greater lack of objectivity to the media and journalists of the host country.

Among the most interesting papers presented in the English sections on Political Communication and Political Discourse/Ideology of Media was the paper on 'Media and Otherness: An Analysis of Press Coverage of Pamuk´s Nobel Case', in which Emre Gökalp (University of Eskisehir, Turkey) presented the results of a discourse analysis of the ten most read Turkish dailies in October 2006. At that time Orhan Pamuk, whose books mainly address the topic of the relationship and conflicts between the European and the Ottoman worlds, had just won the Nobel Prize for Literature, only the second Muslim in the history of the Prize to do so. Considering Turkey's interest in joining the European Union, the topics Orhan deals with are among the most current and, in some contexts, most controversial issues. The writer, who in February 2006 told a journalist from the Swiss *Das Magazin* that one million Armenians and thirty thousand Kurds had been murdered in Turkey and to date still no one speaks of it, was charged in Turkey with insulting Turkishness, the republic, and its institutions owing to the statements he made in that interview. Although the trial was eventually dismissed under pressure from abroad, the way in which the largest Turkish newspapers wrote about Orhan Pamuk's having won this prestigious award reflected that sense of 'insult to Turkishness'. The writer was described in the press mostly in the terms of a national traitor, kowtowing

to the western public, and the Stockholm Academy was portrayed as an institution in league with Turkey's enemies. Only exceptionally was Pamuk hailed by Turkish journalists as a writer of the highest qualities for which he was recognised by being awarded by the Nobel Prize.

Two papers, one titled 'Deserving and Undeserving Woman' (Yasmin Jiwani, Reisa Klein, Canada) and the other titled 'From the 1990s Up To Now: Nationalism in Film and TV Serials in Turkey' (Günseli Pişkin, Turkey), were based on similar paradigms. All three speakers focused on the gender aspects of media content, though each of the two studies the presentations were based on differed in geographical focus and in content. The Canadian studies used content analysis to compare various aspects of the portrayal of native American women and women refugees from Afghanistan after 2001 in selected media in North America; the Turkish paper looked mainly at criticism of the adoration of attributes ascribed to 'traditional men' and the depiction of violence in modern Turkish-produced audiovisual media.

Czech media studies were represented at the conference by Tomáš Trampota (Charles University, Prague) who presented a paper on 'Communicating the US Radar: Influencing the Public by Shaping Media Coverage'. Using materials from a content analysis of selected Czech national newspapers he spoke about the Czech government's media campaign for locating the American antimissile radar in the Czech Republic.

Despite some obvious organisational difficulties (the lack of information for foreign visitors, an inability to adhere to the programme schedule for individual sessions), on the whole the conference must be assessed positively. As doctoral students in media studies, primarily influenced by the Anglo-American literature and research tradition, these authors particularly valued the opportunity to become acquainted with research in the field by Turkish, Latvian, and Greek colleagues, to name a few.

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References

Blumler, J. G. and D. McQuail. 1968. *Television in Politics: Its Uses and Influence*. London: Faber and Faber.

Graber, D. A., P. Norris and D. McQuail. 1998. *The Politics of News: The News of Politics*. Washington: CQ Press.

McQuail, D. 1992. *Media Performance: Mass Communication and the Public Interest*. London: Sage.

McQuail, D. 1994. *Mass Communication Theory: An Introduction*. 3rd Edition. London: Sage.

McQuail, D. 1997. *Audience Analysis*. London: Sage.

McQuail, D. 2003. *Media Accountability and Freedom of Publication*. Oxford: University of Oxford Press.

McQuail, D. 2005. *McQuail's Mass Communication Theory*. 5th edition. London: Sage.

Negrine, R. 1989. *Politics and the Mass Media*. London: Routledge.

Negrine, R. 1996. *The Communication of Politics*. London: Sage.

Negrine, R. 1998. *Parliaments and the Media*. London: Pinter.

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THE CZECH LABOUR MARKET: CHANGING STRUCTURES AND WORK ORIENTATIONS

Edited by Jiří Večerník

Authors: **Vladimír Benáček, Zdeněk R. Nešpor, Martina Mysíková, Natálie Reichlová, Jiří Večerník**

This study looks at a selection of topics to provide a multidimensional picture of the changing Czech labour force and its 'state of mind' and to identify some key problems in this area. In the first chapter, the Czech labour market is observed in various perspectives. The authors begin by describing the specific phases of labour market development in the 1990s, proceed to observe the changing composition of the labour force, labour mobility, and vulnerable categories of people, describe individual policies, especially active labour market policies, and various forms of labour market flexibility, and close with a discussion of some problems of further development. In the second chapter, the authors draw on income surveys covering the period between 1988 and 2002 to illustrate the changes in inequality of earnings and household incomes, the main factors behind their disparities, and the connections between these two distributions. The third chapter looks at the gender wage gap in the Czech Republic. The fourth chapter examines the transformation strategies of Czech agriculture after 1989 in the light of several case studies. The fifth chapter focuses on the dynamics of grand entrepreneurship, examining its roots and further development. The sixth chapter investigates changing work values and job attitudes between 1997 and 2005. The appendices contain texts documenting the changes to occupational structures over time and cross-nationally in a comparison with EU countries.

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