# CULTURAL REPRODUCTION THEORY ON SOCIALIST GROUND: INTERGENERATIONAL TRANSMISSION OF INEQUALITIES IN HUNGARY

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# ABSTRACT

This paper reports on the structure of the intergenerational transmission of social inequality in Hungary in 1982. In the theoretical part of the paper, we compare a functionalist account of the intergenerational transmission of inequality with a cultural reproduction point of view. It is argued that in socialist states, which have weakened economic inheritance by law, the cultural aspects of social inequality have extra force. We also argue that it is inappropriate to conceptualize social inequality in socialist societies only as socioeconomic achievement. Our data treat the intergenerational transmission of social inequality in six dimensions: next to education, occupation, and income, we look at region, housing, and culture con-

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sumption. Our path models suggest that the cultural dimension of social inequality functions as the main transmitter of social inequality, as expected from cultural reproduction theory. However, a cohort analysis reveals that opposite to expectations derived from cultural reproduction theory, parents' cultural resources have had a declining impact on the outcomes for offspring.

# INTRODUCTION

Traditionally, research on the intergenerational transmission of social inequality has mainly concentrated on inheritance of socioeconomic positions, in particular of father-to-son occupational (im)mobility. Since the introduction of status attainment models (Blau and Duncan 1967), other socioeconomic positions, in particular education and income, have been taken into account as well. However, other dimensions of social inequality, such as quality of life and life-style indicators have been largely neglected in intergenerational research. In addition, the vast majority of this work has concentrated on capitalist industrial societies. In this paper, we differ from these traditional intergenerational studies in two respects: (1) we treat the transmission of social inequalities in a *socialist* society; and (2) we use a *multidimensional* perspective.

In order to explain the intergenerational relationships between status dimensions in a socialist society, we draw upon two competing views of social stratification, as offered by (functionalist) modernization theory and by the opposing (neo-Weberian) cultural reproduction theory (cf. Collins 1971, 1979). Modernization theory predicts a historically declining influence of parental statuses on offspring's outcomes, and leads one to expect that financial resources of parents and their command over material goods are primarily responsible for the remaining intergenerational associations. In contrast, cultural reproduction theory argues that cultural assets, in general, and education, in particular, serve as the main reproductive channels for intergenerational status transmission. We argue that this cultural mechanism has a special relevance in state socialist societies. In such societies, where material inheritance has been restricted by political circumstances, cultural resources and educational attainment play roles in the intergenerational transmission of inequality that may be even stronger than the roles they play in modern capitalist societies.

The empirical part of the article investigates intergenerational transmission of social inequality in Hungary in 1982, in six separate dimensions: (1) education, (2) region, (3) occupation, (4) economic status, (5) housing status, and (6) cultural consumption. We report on respondents' and parents' positions on each of these distinct aspects of inequality and thus extend the classic status-attainment model. Before analyzing these data, three issues need to be addressed at the theoretical level:

- 1. The implications of the modernization and cultural reproduction theories of stratification for the intergenerational relationships among status indicators in general.
- 2. The applicability of these theories to stratification processes in socialist conditions.
- 3. The multidimensional structure of social inequality, in socialist societies in general, and in Hungary in 1982, in particular.

Modernization Theory Versus Cultural Reproduction Theory

According to the "functionalist" modernization theory of social inequality (Parsons 1940; Davis and Moore 1945; Lenski 1966; Blau and Duncan 1967), social positions in preindustrial societies are distributed according to ascribed criteria, among which family background is of prime importance. In these societies, social positions are transmitted between generations either by entitlement, direct transfer of possessions, or by legal discrimination. As a society modernizes and the demand for qualified personnel in industry and bureaucracy increase, ascribed criteria are assumed to be replaced by meritocratic rules of selection (Kerr, Dunlop, Harbison, and Myers 1960). The influence of parents on offspring's social opportunities disappears, and the rest of the status-attainment model will be a simple causal chain. The educational system becomes the primary device for efficient labor force allocation. The occupational structure, in its turn, distributes other social rewards: power, prestige, and income. Levels of consumption, inasfar as they are not determined by income restrictions, correspond to social prestige, that is, primarily determined by occupational status.

Next to these hypotheses on the structure of the status-attainment model, three predictions on the historical changes in the status-attainment process in modernizing societies can be derived (Treiman 1970). First, it is predicted that historically formal education has become more important as a determinant for who gets the most attractive occupational positions. Second, it is predicted that direct intergenerational transfer of occupational and economic status (outside the educational channel) will decline over time. This is because (1) occupational positions that are traditionally acquired by a direct transfer of property decrease in number, and (2) achievement values replace ascriptive values in selection processes. Third, assuming that the inequality in educational outcomes between social strata is not balanced by a corresponding inequality in innate talents, it is predicted that the association between family origins and educational attainment will decline over time.

These views, in particular the prediction on historical developments, have not remained unattacked (Collins 1971, 1979). The first two, stating that educational attainment has had a growing impact on occupational outcomes, and that direct transfer of occupational status has become less important, have found only mixed support and the shifts, if observed, are not large. For example, for the United States, Blau and Duncan (1967), comparing birth cohorts, ranging from men born in 1900 to men born in 1940, do not find any trends. Featherman and Hauser (1978), comparing cohorts as well as periods, find only small and largely erratic fluctuations. However, using more recent data and a comparison over a 15-year period, Hout (1988) finds a growing importance of the educational component in the transfer of occupational positions between generations.

The major failure of modernization theory, however, is with respect to the third prediction, that educational outcomes are decreasingly determined by family background. This crucial prediction is not corroborated at all in the major empirical studies (e.g., Hauser and Featherman [1976] and Mare [1981] on the United States; Halsey, Heath, and Ridge [1980] on the United Kingdom; and Simkus and Andorka [1982] on Hungary).

As a response to the empirical problems of this functionalist view on social inequality, conflict theories of social stratification point to the importance of cultural factors (Collins 1971, 1979; Bourdieu and Passeron 1977, 1979; DiMaggio 1982), in particular as an explanation of the persistent inequalities in educational attainment. According to these theories, the educational system is not a neutral testing device for the capabilities of individuals, but rather a biased screen. Students do not enter the system as tabulae rasae, but bring with them cultural preferences, primarily obtained in the parental family. It is assumed that schooling does not compensate deficiencies, but instead cultivates items that already have been acquired at home by some students and have not been acquired by others. According to this view, selection in the educational system often is self-selection, produced by a mismatch between the educational system and the background of students of lower social status. At the same time, certificates and diplomas are not to be regarded as valid indicators of intellectual capacities, but as credentials for the appropriate control over certain behavioral codes. This corresponds with biases in the labor market, where access to jobs is presumed to be regulated by similar cultural processes (Berg 1970; Collins 1974). The process of stratification is seen as a continuous conflict between culturally-defined status groups. Authors in this tradition have stressed the continuity between generations so much that they have come to label the process of stratification as "reproduction" (Bourdieu and Passeron 1977).

Swartz (1977) points out that cultural reproduction theory concurs with functionalist theory in the prediction that educational credentials have had a growing importance for status attainment. However, reproduction theory also offers an explanation for the observed stability of inequality in educational achievements and suggests some additional hypotheses on the processes involved.

The first hypothesis in the cultural reproduction framework proposes that education is the major channel of intergenerational transmission of inequality. When educational attainment is controlled for, there should remain no large effects of parental characteristics on adult achievements. Furthermore, it is posited that the school system enhances a bias in favor of intellectual and cultural

elites. This is the hypothesis that has been corroborated by the research of Bourdieu and Passeron (1979): the educational system is extremely favorable to the descendants of those who control this system, like teachers and scientists. Another argument in favor of this point is that in the determination of educational success, not the parents' occupational status or financial position, but the parents' educational background is the strongest determinant (Treiman and Yip 1989).

The second corollary of cultural reproduction theory of stratification is the prediction that the association between family background and offspring's educational attainment is explained by control over cultural resources. That is, reproduction of parents' status into the next generation takes place if and only if there is a successful reproduction of control over cultural resources and disposal over cultural resources can be shown to be an intervening variable between origin and destination. This is what much research in this field has indeed tried to show. Whereas the work of Bourdieu and Passeron (1977, 1979), never showing more than bivariate relationships, gives only weak confirmation for this hypothesis on the cultural interpretation of educational reproduction, research with stronger designs (DiMaggio 1982; DiMaggio and Mohr 1985; De Graaf 1986, 1988) has come up with some successful tests.

Not all research has produced favorable results for the cultural reproduction thesis. Halsey et al. (1980) cite as contra-evidence their finding that in the United Kingdom no shift towards more favorable outcomes for offspring of the better-educated can be observed. For France, the "home ground of reproduction theory," Robinson and Garnier (1985) show that the effects of reproductive channels outside the educational system, in particular in high status occupations, have not disappeared. The persisting existence of these noneducational routes of intergenerational immobility has led these authors to the conclusions that the role of formal education "has been much overstated by the reproduction theory" (Robinson and Garnier 1985, p. 279).

In this paper, we add new empirical evidence to this controversy. Since we not only look at the intergenerational transfer of occupational positions and the role of formal education in the process of stratification, but also at the intergenerational transmission of other dimensions of social inequality, we are able to test the predictions of cultural reproduction theory in a more substantive way than previous research. In particular, we are able to test how much the command over cultural codes, as indicated by cultural consumption in the parental family, contributes to the status attainment and life style of the offspring.

#### The Intergenerational Transfer of Social Inequalities in a Socialist Society

The theory of the cultural reproduction of social inequality has evolved in Western societies like France (Bourdieu) and the United States (Collins, DiMaggio). In what respect is it applicable in socialist societies and, in particular, in Hungary? Before we start our discussion, it should be acknowledged that our data refer to the beginning of the 1980s, which is the reason why we can discard recent political developments.

To begin with, it should be acknowledged that in the decades before the 1980s, Hungarian society underwent strong economic developments and changes (Ferge 1979). At the beginning of the socialist period (1949), the country could be regarded as having a predominantly agricultural economy. More than 50% of the labor force was still in the primary sector. Since that time, industrialization has taken place firmly, notwithstanding throwbacks by political upheavals and economic crises and, in 1982, only ten percent of the labor force was in the primary sector. The division of labor had, therefore, changed severely over the previous decades, pulling and pushing many persons into industrial and white-collar jobs. This modernization process took place in a state socialist political climate, which has had consequences for policies with respect to the distribution of inequality. Simkus and Andorka (1982) point out that socialist rule has effectively restructured society and cut back the possibilities of material transfer of inequality. Several instances of this should be mentioned.

First, socialist policies have influenced occupational inheritance directly by removing intergenerational transfer of means of production and self-employment. Occupational categories, which in capitalist societies usually reproduce themselves outside the educational system and without an appeal to symbolic legitimation, have virtually disappeared. In Hungary, their functionally equivalent counterparts, that is managerial positions in production and commerce, have typically been filled with recourse to educational and political credentials.

Second, the socialist regime has attempted to carry out educational reforms (for an overview, see Simkus and Andorka [1982]). As in Western countries, financial barriers have been leveled and prolonged compulsory enrollment has been established. At the same time, the educational system has been extended with "second chance" education that takes place in the evenings, on weekends, and during educational leaves. In comparison to other countries, this road to diplomas has been large and provides opportunities for intragenerational upward mobility (Kolosi and Robert 1985).

In brief, one can suppose that the developments outlined in the modernization theory of stratification have taken place in Hungary a fortiori. If one has strong convictions about the role of educational reforms in altering social opportunities in modernizing societies, Hungary is certainly a good place to test them.

On the other hand, socialist societies are a perfect test case for the theory of cultural reproduction of social inequality as well. Where nearly every other strategy of reproduction has been eliminated, the educational system with its presumably legitimizing facade of meritocracy may have grown an importance for the distributive process. The accompanying hypothesis is that, in socialist societies, this theory must have more explanatory value than in their capitalist

counterparts. Indeed, some authors (Konrad and Szelenyi 1979) have maintained that the socialist revolution has worked out to be "the final victory of the intellectuals," thereby implying an extreme applicability of cultural reproduction theory to Hungarian society. Earlier research on stratification in Czechoslovakia and Hungary (Machonin 1970; Safar 1971; Kolosi 1984; Robert 1984) suggests that cultural inequality is indeed the major form of stratification in socialist societies. Also in line with the major hypothesis of cultural reproduction theory, Simkus and Andorka (1982) find that only minor historical changes can be observed in the dependence of educational achievements on family background in Hungary. In sum, it is particularly appropriate to compare modernization theory and cultural reproduction theory with respect to their explanatory power for stratification processes in socialist societies.

#### Multidimensional Transfer of Social Inequality Between Generations

Traditional research on social stratification and intergenerational transmission of social inequality has concentrated on occupation as the main dimension of social stratification. As one of the classic authors (Glass 1954, p. 6) maintains: "Occupation reflects the combined influence of a number of factors linked to social status". Blau and Duncan (1967, p. 6) put it this way: "Occupational position does not encompass all aspects of class, but is probably the best single indicator of it". And, although Featherman and Hauser (1978, p. 19) acknowledge the importance of "the analysis of other aspects of social inequality," they stress, at the same time, the centrality of occupational roles and mobility in the process of stratification, both "as a fundamental indicator of the temporal aspect of social stratification" and in "the differential access ( . . . ) to social rewards such as deference, political influence, and income." These statements disregard two important points.

First, there can be serious doubts as to whether inequality in occupational conditions should indeed be regarded as the central factor that Glass and others have held it to be. We would venture to generalize that, in empirical analyses of characteristics of life styles and life chances, it is educational attainment that has more often proved to be the most important determinant of inequality, not occupational achievement. Children's educational attainment (Hauser and Featherman 1976; Halsey, Heath, and Ridge 1980; Vrooman and Dronkers 1986), partner selection (Blau and Schwartz 1984), cultural consumption (DiMaggio and Useem 1980; Ganzeboom 1982; Bourdieu 1984), and value patterns (Hyman, Wright, and Reed 1975; Inglehart 1977; Alwin 1984; Savage 1985) are all examples of outcomes in the stratification process that are affected more by education than by occupation or any other background variable. This is an important point, because it is much in line with cultural reproduction theory.

Second, there can be no doubt that the social rewards exist in more than one dimension and that those dimensions are not perfectly correlated. Next to in-

equalities flowing from the occupational position, such as work conditions and earnings, other dimensions of importance are nonlabor income, wealth, housing conditions, and consumption status. This is true for both socialist and market economies but, in socialist conditions, it is more important to take them into account, since they are not distributed on the labor market. Sociologists from socialist countries (Wesolowski and Slomczynski 1968; Machonin 1970; cf. Kolosi 1984) were among the first to apply a multidimensional viewpoint to social stratification and inequality systems. They felt that traditional marxist class theory, which concentrates on the effects of the division of labor, was no longer appropriate to describe social stratification in state socialist societies. Therefore, they turned to a stratification model with a multidimensional point of view in order to attain an account of life chances and life styles in these societies. According to these authors-and we agree with them-social inequality should be looked upon as a broad concept, covering hierarchical differences in life chances and life styles in several areas. The task of empirical analysis is not to exclude some of these dimensions in favor of one or few of the others, but to assess the degree of inequality on each of these dimensions and to describe and explain the relations existing among them.<sup>1</sup>

# DATA, METHODS, HYPOTHESES

The data used in our analyses are based on a survey of the Institute for Social Sciences (Budapest) in collaboration with the Hungarian Central Statistical Office (Kolosi 1982). The method of the survey was personal interviewing between January 1981 and March 1982. The interviewers visited the respondents several times with different questionnaires and asked them about their occupations, educational attainment, housing conditions, life circumstances, leisure time activities, financial situation, consumption habits, demographic characteristics, and childhood. The initial sample was representative for the Hungarian population over 18 years of age (N = 15,839). For the purposes of the analysis, we selected a subsample: the married male active earners between 26 and 60 years of age with complete data on all dimensions of inequality (N = 3,540). However, because our variables refer to a large extent to characteristics of the total family, it is appropriate to say that our unit of analysis is the family rather than individual married men.

Because cross-sectional data like ours mix up age and cohort effects, we must refrain from conclusions with respect to historic developments, with one exception. Trend analysis via cohort comparisons is feasible with respect to events that are (relatively) fixed in the life course, such as the final level of formal educational attainment. For this purpose, the sample is divided into three approximately equally-sized age groups: 1,295 respondents 47–60 years–old, 1,186 respondents 36–46 years–old, and 1,059 respondents 26–35 years–old.

Our analysis covers six dimensions, each of which represents an important but

distinct form of social inequality in Hungary. We use equivalent indicators for respondents and their parents. For regional status, educational attainment, occupational achievement, and housing situation, we have exactly identical indicators for both generations. Financial status (income) and cultural status (consumption) could not be measured completely identical, but adequate parallel measurements have been constructed. The indicators for the six dimensions can be found in Table 1, and the means and standard deviations of the indicators are displayed in Table 2.

Educational attainment is the first dimension of social inequality to be assessed. It is measured on a seven-point scale that reflects the formal duration of schooling per educational level. The measure for the destination generation pertains to the educational attainment of the respondent. The measure in the parents' generation pertains to both parents of the respondent.

Status	Parents	Son
Educational	Father's Educational attainment <sup>a</sup>	Educational Attainment <sup>b</sup>
	Mother's Educational attainment <sup>a</sup>	
Occupational	Prestige score father's occupation <sup>c</sup>	Prestige Score Occupation <sup>c</sup>
Financial	Eating meat in childhood <sup>d</sup>	Income in Household <sup>g</sup>
	Number of pairs of shoes in childhood <sup>e</sup>	
	Sunday clothes in childhood <sup>f</sup>	
Regional	Region of birth <sup>b</sup>	Region of living at time of interview <sup>b</sup>
Housing	Toilet and bathroom in childhoodh	Toilet and bathroom <sup>h</sup>
	Persons per room in childhood <sup>i</sup>	Persons per room <sup>i</sup>
Cultural	Cinema trips in youth <sup>k</sup>	Reading frequency <sup>1</sup>
	Theater trips in youth <sup>k</sup>	Theater trips <sup>m</sup>
	Museum trips in youth <sup>k</sup>	Museum trips <sup>m</sup>
	Book reading in youth <sup>k</sup>	Concert trips <sup>m</sup>
		-

 
 Table 1. Indicators for Six Dimensions of Social Inequality in Two Generations

Notes: arefers to the seven-point scale that reflects the formal duration of schooling per educational level: (1) uneducated; (2) primary 1-5 classes; (3) primary 6-7 classes; (4) primary 8 classes; (5) vocational training; (6) secondary school; (7) university.
 b(6) Budapest; (5) the five biggest towns with county right; (4) the additional county seats; (3) all other towns; (2) the large villages; (1) the small villages.

<sup>c</sup>Treiman's International Occupational Prestige Score/10 (Treiman 1977).

<sup>d</sup>(5) every day; (4) several times a week; (3) once a week; (2) monthly; (1) more rarely.

e(0) none; (1) one pair; (2) two or three pairs; (3) more than three pairs.

f(0) none; (1) one piece; (2) more.

<sup>8</sup>Total family income/1000.

<sup>h</sup>(1) no toilet, no bathroom; (2) toilet or bathroom; (3) toilet and bathroom.

<sup>1</sup>Persons per room: (1) more than 3; (2) 2-3; (3) 1.5-2; (4) 1-1.5; (5) less than 1.

<sup>j</sup>number of books/100.

<sup>k</sup>(1) never; (2) occasionally; (3) regularly.

<sup>1</sup>number of books read in last two months.

mnumber of trips in the last year.

		Respondents 47–60 Years (N = 1295)		Respondents 36–46 Years (N = 1186)		Respondents 26-35 Years (N = 1059)	
Status		Mean	SD	Mean	SD	Mean	SD
	Pare	nts					
Educational	Father's educational attainment	3.10	1.18	3.49	1.42	3.94	1.39
	Mother's educational attainment	2.67	0.81	2.93	0.96	3.35	1.07
Occupational	Prestige score father's occupation	2.39	1.17	2.61	1.38	2.83	1.55
Financial	Eating meat in childhood	3.35	0.66	3.41	0.63	3.69	0.53
	Number of pairs of shoes in childhood	1.36	0.60	1.45	0.57	1.83	0.56
	Sunday clothes in childhood	1.06	0.53	1.08	0.51	1.38	0.55
Regional	Region of birth	2.22	1.57	2.42	1.69	2.59	1.79
Housing	Toilet and bathroom in childhood	0.14	0.47	0.25	0.63	0.52	0.82
	Persons per room in childhood	1.70	1.00	1.79	1.02	2.16	1.07
Cultural	Number of books in the household	0.36	2.25	0.43	1.41	0.66	1.72
	Cinema visits in childhood	0.80	0.76	1.22	0.72	1.56	0.59
	Theatre visits in childhood	0.32	0.71	0.52	0.79	0.80	0.79
	Museum visits in childhood	0.29	0.64	0.53	0.75	0.84	0.77
	Book reading in childhood	0.82	0.77	1.02	0.75	1.27	0.68

# Table 2. Means and Standard Deviations for Indicators of Six Dimensions of Social Stratification in Two Generations,

by Age Cohort

Respondents										
Educational	Educational attainment	4.49	1.38	4.92	1.24	5.27	0.95			
Occupational	Prestige score occupation	3.64	1.45	3.79	1.38	3.80	1.30			
Financial	Income in household	4.99	2.49	5.05	1.56	4.69	1.21			
Regional	Region of living at time of time of	Region of living at time of time of								
	interview	2.77	1.84	2.98	1.83	3.01	1.87			
Housing	Toilet and bathroom	1.31	0.86	1.46	0.82	1.36	0.87			
	Persons per room	3.76	1.17	3.29	1.09	3.15	1.13			
Cultural	Number of books in households	1.77	2.41	2.09	2.37	1.76	2.10			
	Reading frequency	1.22	2.19	1.58	2.46	1.98	2.70			
	Theatre visits	0.63	1.55	0.86	1.81	0.76	1.73			
	Museum visits	0.74	1.87	0.97	2.08	0.78	1.86			
	Concert visits	0.12	0.75	0.17	0.91	0.09	0.64			

The second dimension of social inequality is occupational status. In absence of a well-developed Hungarian prestige scale or socioeconomic index, we have applied Treiman's (1977) international prestige score to the occupational position. The measure in the parents' generation is restricted to father's occupation, since female employment was at a low level in the older generations and inclusion of mother's occupation would seriously misrepresent the true level of occupational status in the parents' generation.

The third dimension of social inequality is that of financial status. While the financial status for the respondents is measured directly, by means of their household income, the origin financial status is measured indirectly. Respondents were asked how many pairs of shoes and how many special Sunday clothes they had at their disposal in their childhood, and how frequently meat was included in their daily menu. In a retrospective design, such indirect measurement is a much better way to ascertain the financial situation of parents than a direct question on family income, because the latter highly depends upon reference categories, selective memory, and current financial circumstances.

Education, occupation, and financial status are the traditional ingredients of the status-attainment model. As a forth dimension, we add regional status. It is coded in six categories, from Budapest on the top of the scale, to small villages on the bottom. Regional location can be interpreted as a form of social inequality, primarily because of differences in the level of facilities and accommodations between regions. Such differences have been shown to be large in contemporary Hungary (Kulcsár 1984). In regions with the lowest population densities, there are no universities and few schools for higher secondary education. In those regions, the demand for high status and well-paid jobs is also smaller, and there are less cultural facilities as well. Note that people who are immobile in regional status have not necessarily been immobile geographically. When persons have moved from one place of residence to another between childhood and adulthood, and both residences are in one category, we counted them as immobile.

The fifth dimension of social inequality to be analyzed is housing status. The housing status is measured by the same two indicators for the two generations: whether the dwelling contains a toilet and a bathroom, and the person/room ratio. Earlier research has shown that inequalities in housing in Hungary are particularly large (Szelenyi 1983). This author also shows that this type of inequality is closely intertwined with educational and occupational differences: although the distribution of dwellings in Hungary is nearly completely exempted from market mechanisms, the housing distribution policies have had favorable outcomes for white-collar workers and intelligentsia.

The sixth dimension of social inequality is consumption of cultural goods. This dimension performs two roles in our line of argument. First, because the production of culture is nearly completely state financed in Hungary, it is an indicator of social rewards that result from government policies and subsidies. Second, measures of culture consumption indicate the control over behavioral codes and resources that authors like Bourdieu and DiMaggio have shown to be

of prime importance in stratification in Western societies. They permit us to assess the applicability of the cultural reproduction theory of social stratification in a socialist society. Culture consumption was measured somewhat differently for the two generations. Information about the number of books present in the family of origin was available, together with information about the frequency of theater, museum and cinema visits, and of book reading, all in early childhood. The indicators of the respondents' culture consumption were ascertained by five items, two about reading behavior, and three about high culture participation.

Altogether there are two  $\times$  six inequality measures to be analyzed with regard to their associations between generations. We will estimate a causal model, through which the relationships between the dimensions of inequality can be disentangled. The structure of this model is given in Figure 1.



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Figure 1. Casual Model for Intergenerational Inheritance of Inequality in Six Dimensions

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On the left side of Figure 1, the six dimensions of origin inequality are displayed, the right side gives the achievements in the respondent's generation. Each variable to the left is supposed to affect all variables ordered to the right of it. The order of the six dimensions follows the assumed sequence of events of the life course. This sequence is: educational attainment, regional settlement, occupational status, income, housing status, and cultural consumption, where housing status and cultural consumption are supposed to have occurred simultaneously.

The first achieved status is educational attainment, followed by (achieved) regional status. Regional settlement is assumed to follow education, since the typical pattern of migration is that of moving (to an urban area) as a consequence of taking part in advanced forms of education.<sup>2</sup> Occupational achievement is then regarded as the consequence of family background, educational attainment, and regional location. Income is affected by occupational achievement, regional status, educational attainment, and family background. Housing status and cultural status are both possibly affected by all the other variables in the model.

There are three hypotheses to be tested with respect to this causal model. The first one is common to the functional and the cultural reproduction theory of stratification.

**Hypothesis 1.** Educational attainment is the main channel that transmits status positions from parents' generation to the respondent's generation.

With respect to the distribution of social inequality in the respondents' generation, the functionalist theory predicts that:

**Hypothesis 2a.** In the respondents' generation, the occupational position will be the principal determinant of the subsequent forms of inequality, such as financial and consumption statuses.

Cultural reproduction theory holds:

**Hypothesis 2b.** In the respondents' generation, the educational position will be the principal determinant of the other forms of inequality, relative to occupational and financial statuses.

With respect to educational attainment itself, the two theories also differ in their prediction. The functional approach specifies that:

**Hypothesis 3a.** Educational attainment becomes less influenced by family background over time, in particular with respect to financial resources in the parents' generation.

Whereas reproduction theory holds, alternatively:

**Hypotheses 3b.** The transmission of educational inequality remains stable over time and educational attainment is governed by disposal over educational and (other) cultural resources.

## ANALYSIS

Our research design implies 12 separate measures of inequality, six for each of the two generations. Five of them have only one measured indicator, the seven others are measured via multiple indicators (Table 1). In total, our design implies a  $26 \times 26$  covariance matrix between these indicators. To evade the complexities of a simultaneous estimation procedure for such a large matrix, we have taken recourse to a two-step procedure that combines the advantages of multiple measurement techniques with efficiency in model estimation. In the first step, the covariances between the 26 measured indicators of the different aspects of social status were modelled using complete measurement models. Within these measurement models, we assumed that for each aspect of social inequality one latent variable explains the relationships between its indicators. In this first step, no restrictions were put upon the covariances between the latent variables. As a consequence, this model gives an estimate of the amount of misspecification, due to the measurement part of the model. The goodness-of-fit statistic of this model is 2692 with 216 degrees of freedom. Following Jöreskog and Sörbom (1986, pp. 138-142) and, given the large number of cases and the amount of parameters, we do not consider this as a serious misfit. More importantly, neither the pattern of standardized residuals nor substantive insight suggested any major modification of the model. Fitting additional parameters to bring down the fit statistic would have been a completely ad hoc procedure. We then extracted the estimated covariance matrix of the 12 latent constructs from this analysis. This extracted covariance matrix is used in the second step of the analysis that estimates the structural models that pertain substantively to our hypotheses.

Panel A of Table 3 presents the correlation coefficients between the 12 (21  $\times$  6) dimensions of social inequality. The underlined coefficients are the zero-order correlations indicating intergenerational continuity/discontinuity in each of the six dimensions of social inequality. In panel B, these correlation coefficients are displayed together with the direct standardized effects, when the appropriate controls, as defined in the causal model in Figure 1, are taken into account. We observe moderate to high correlations for five of the six dimensions. The highest associations are for the intergenerational continuity of regional inequality, educational inequality, and cultural status. All of these display correlation coefficients of around 0.60. The housing situations of parents and respondent are more loosely correlated (r = 0.39), followed by occupational achievement (r = 0.30). The intergenerational association of financial status is relatively low (r = 0.11).

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It is interesting to note that although most zero-order correlations are far from nil, the coefficients of determination, that is the square of the correlations is never over 50 percent, which suggests that a terminology like "reproduction of social inequality" is indeed an overstatement. Determinants of educational, socioeconomic, and cultural achievements outside the model play larger roles than family background and even the other measured individual characteristics. Nevertheless, a significant (and comparatively high) degree of intergenerational transfer of social inequality is observed.

The second column in panel B of Table 3, denoted with " $\beta$ ," displays the standardized direct regression coefficients for each of the six dimensions of inequality. Only three of these coefficients are of substantial size. These are the strong direct effects for the educational dimensions ( $\beta = 0.39$ ), the regional dimension ( $\beta = 0.53$ ), and the cultural dimension ( $\beta = 0.31$ ). Of the three remaining coefficients (for occupational prestige, financial status, and housing status), two are still statistically significant, but they do not have substantial values. This suggests that the direct transfer of occupational position, income, and possessions is unimportant, once the influence of education and region has been partialled out.

Table 4 shows the complete regression equations that produced these results, for five of the six dimensions. (The equivalent equation with education as the dependent variable is treated separately in Table 5.) The major findings in Table 4 for the evaluation of our first hypothesis are the strong direct effects of educational attainment on all the other status characteristics of the respondent. There are close connections between the educational attainment of respondents, on the one hand, and all of their other statuses, on the other.

Variable (A) shows the determinants of regional location. Somewhat at variance with our prior expectations is that the main influence is exerted by parents' regional location ( $\beta = 0.53$ ). However, this is a trivial result. Unlike the other dimensions in the analysis, regional location remains the same, by way of nature, if the respondent has remained inert. At the same time, the size of the town that the respondent is currently living in shows to be substantively influenced ( $\beta = 0.24$ ) by his educational attainment. This, and the contributions that respondent's regional status makes to the subsequent forms of social inequality in the model, forcefully illustrates the large social inequalities that are connected to regional status in Hungary.

The occupational prestige of the respondents (Variable B) turns out to be strongly affected by his educational attainment ( $\beta = 0.60$ ) and slightly by his regional location ( $\beta = 0.06$ ). A relevant point to observe in this equation is that hardly any effect of occupational status of father's occupational status remains ( $\beta = 0.08$ ).

Variable (C) for income acquisition shows the same pattern of spuriousness for the parents' corresponding characteristic. The (statistically significant) zeroorder correlation of 0.11 vanishes completely, if the appropriate controls are taken into account. The interesting point to observe in the income equation is

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ial status	0.407	0.236	0.296	0.226	0.383	0.420	0.316	0.643	1.000			
tatus	0.235	0.206	0.156	0.109	0.258	0.270	0.295	0.378	0.371	1.000		
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Table 3. Intergenerational Association in Six Dimensions of Social Status

**B** Zero-Order Correlations and Standardized Direct Effects\*

	r	β
Educational attainment	0.587	0.388
Regional status	0.600	0.525
Occupational achievement	0.296	0.075
Financial status	0.109	-0.020 ns
Housing status	0.385	0.068
Cultural status	0.635	0.312

Note: \*The standardized direct effects  $\beta$  were computed in an equation that regresses each variable on all parental characteristics and on all causally prior respondent's characteristics (cf. Figure 1). See Tables 4 and 5 for the complete regression equations.

	Dependent Variables							
Predictor Variables	Regional Status (A)	Occupational Prestige (B)	Income (C)	Housing Status (D)	Cultural Consumption (E)			
Parents' corresponding status	0.525**	0.075**	-0.020	0.068**	0.312**			
Respondent's:								
Educational attainment	0.243**	0.595**	0.192**	0.380**	0.213**			
Regional status	<del></del>	0.055**	0.155**	0.162**	0.158**			
Occupational achievement			0.204**	0.057**	0.241**			
Income			<u> </u>	0.099**	0.112**			
R <sup>2</sup>	0.413	0.422	0.219	0.355	0.598			

 
 Table 4.
 OLS Estimates of Models of Intergenerational Transmission of Social Inequality, Standardized Coefficients

*Notes:* \*p < .05,

\*\*p < .01.

again the strength of the educational coefficient ( $\beta = 0.19$ ). Whereas income is usually thought of as a direct consequence of job characteristics, similar to prestige, the Hungarian stratification system rewards educational attainment as such to an only slightly lesser extent.

Variable (D) shows that although there is a large zero-order correlation (r = 0.39) between the generations in housing status, there is hardly any evidence ( $\beta = 0.07$ ) of direct intergenerational transmission of the housing status itself. Interestingly again, education plays a major role in the distribution of housing ( $\beta = 0.38$ ). Surprisingly, neither income, occupation, nor region seems to be very important in this respect. This corresponds to what Szelenyi (1983) found: the Hungarian housing distribution process is extremely profitable for the intelligentsia.

Finally, Variable (E) in Table 4 estimates the determinants of culture consumption. It shows that the major factor of influence is the corresponding cultural status of the parents ( $\beta = 0.32$ ), followed by respondent's occupational ( $\beta = 0.24$ ) and educational statuses ( $\beta = 0.21$ ). The differentiation in income ( $\beta = 0.11$ ) and in regional status ( $\beta = 0.16$ ) are of moderate importance for culture consumption.

These results generally confirm our first hypothesis that formal education is the main channel of intergenerational transmission of social inequality in Hungary. The two substantial effects of the parents' characteristics that remain after controlling for educational attainment, are parents' regional status on respondent's regional status and parents' cultural status on respondent's culture consumption. We regard the former as a trivial result. The latter, however, invites an interpretation of the process of stratification in Hungary more in the vein of cultural reproduction theory than a functionalist account.

Among our second pair of hypotheses-that refer to the issue of whether

education or other status dimensions are the primary devices of distribution of outcomes in Hungary—, the prediction from cultural reproduction theory receives strong confirmation. Very striking with respect to the second pair of hypotheses is that neither financial nor occupational status affect housing status, and that financial status is also of little importance for culture consumption. The estimated coefficients show a pervasive direct influence of formal education on all other aspects of social inequality. An interpretation of this overruling influence of educational attainment, in light of cultural reproduction theory à la Bourdieu, seems to be more fitting than a functional explanation. In particular, the effects of education on housing and income are hard to reconcile with a functionalist framework.

Of additional importance for the choice between the two approaches is the determination of educational achievement, as well as developments in that respect over time, as stipulated in our third pair of hypotheses. Cultural reproduction theory would specify a stable or even growing importance of parents' education and other cultural background variables on respondents' educational attainment, whereas a functional approach would predict a decreasing influence of parents' characteristics over time, in particular of their financial resources.

Table 5 presents regression equations that estimate the effects of the six dimensions of family background on educational attainment for the three birth cohorts. The first column gives the equation for the total sample. As already seen in panel B of Table 3, there is a strong direct connection ( $\beta = 0.39$ ) between the educational attainments of the respondent and his parents. Second, there are no or only slight direct effects from parents' regional, housing, occupational, or financial positions: the relevant  $\beta$ 's are 0.01, 0.01, -0.08, and 0.03, respectively, Thus, material possessions and economic dispositions prove to be of no importance at all in the intergenerational transmission of inequality via the educational channel. Third, and most conspicuously, a major influence on educational attainment is exerted by the cultural status of the parents. The beta-weight is 0.35 and nearly matches the effect of parents' education.

The last three columns in Table 5 allow one to perform a cohort comparison in order to assess trends in determination of educational attainment in Hungary. Given the age range of the cohorts, the time of the survey, and the median age of completion of formal education, these comparisons refer (on average) to different periods for the three age cohorts. Members of the oldest cohort are born between 1922 and 1935 and have encountered the critical phases of their educational careers during the 1930s and 1940s, before or during World War II. The second cohort is born between 1935 and 1945 and their educational careers reflect the opportunity structure in the late 1940s and 1950s, in the aftermath of World War II and the transition to socialism. The youngest cohort was born between 1946 and 1957; this cohort entered—or did not enter—secondary education between the end of the 1950s and the early 1970s, when socialist policies were firmly established.

We have tested for trends in this comparison by putting equality constraints on

Predictor Variables	All			Respondents 47–60 Years (N = 1295)	Respondents 36–46 Years (N = 1186)	Respondents 26–35 Years (N = 1059)
Parents' educational status	0.426**	(0.39)	a <u>,</u>	0.561**	0.426**	0.257**
Parents' regional status	0.010	(0.01)	equality constraint:	0.002	0.002	0.002
Parents' occupational status	-0.076*	(-0.08)	equality constraint:	-0.057*	-0.057*	-0.057*
Parents' financial status	0.118	(0.03)	equality constraint:	0.063	0.063	0.063
Parents' housing status	0.017	(0.01)	equality constraint:	0.233	0.233	0.233
Parents' cultural status	0.570**	(0.35)		0.594**	0.387**	0.316**
R <sup>2</sup>	0.424			.419	.419	.324

# Table 5.OLS Estimates of Family Background Effects on Educational Attainment,<br/>According to Preferred Model (5) of Table 6, by Cohort<sup>a</sup>

Dependent Variable: Educational Attainment

Notes: "Standardized coefficients in parentheses.

\*p < .05.

 $i^{**p} < .01.$ 

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parallel effects over cohorts. For this purpose, in a first step, three variancecovariance matrices were estimated, again based on the original indicators, while constraining the measurement models to be equal among cohorts. The constraints are required to ascertain that the (latent) dimensions of social inequality are measured in the same units. In a second step, the resulting three 7\*7 (six background statuses and educational attainment) variance-covariance matrices were analyzed. The deterioration-of-fit is evaluated with the help of the Bayesian Information Statistic BIC (Raftery 1986). The model with the lowest BIC should be preferred.

In Table 6, goodness-of-fit statistics of selected models are presented. The likelihood ratio (chi-square distributed) statistic for model 2, in which all effects from the six dimensions of social inequality on educational attainment are constrained to be equal over cohorts (model 2) is 184.4, with 12 degrees of freedom. This amounts to a BIC-value of +86.3. Obviously, the saturated model 1, which holds that all effects are different over cohorts, is better. Subsequent equality constraints on the models bring the BIC value down. In model 3, all effects are modelled to be equal over cohorts, with one exception: only the effects of parents' education are allowed to vary over cohorts. This model improves both the likelihood ratio and the BIC statistics to a considerable degree. In model 4, only the effects of parents' cultural status are allowed to vary. Compared with model 2, model 4 improves the overall model, but the BIC is positive, suggesting that it is not preferable to the saturated model.

Our preferred model is in line 5 of Table 6. This model states that the effect of parents' regional, financial, housing, and occupational statuses are equal over cohorts, and that both parents' educational and cultural statuses vary over cohorts. This model has a likelihood ratio of 45.3 with 8 degree of freedom. Although this is still statistically significant according to conventional standards, the BIC statistic of -20.0 indicates that the model is better than the saturated

Мос	lel	Chi <sup>2</sup>	df	BIC
(1)	All six family effects different over cohorts	0	0	0
(2)	All six family effects equal over cohorts	184.4	12	86.3
(3)	Effects of parents' educational attainment different over cohorts, all other family effects equal over cohorts	63.8	10	-17.9
(4)	Effects of parents' cultural status different over cohorts, all other family effects equal over cohorts	91.0	10	9.3
(5)	Effects of parents' educational attainment and parents' cultural status different over cohorts, all other family effects equal over cohorts	45.3	8	-20.0

 Table 6.
 Goodness-of-Fit Statistics for Selected Models for Cohort

 Comparisons of the Effect of Six Dimensions of Family Background on

 Educational Attainment

model and the sequence of models in Table 5 shows that the overwhelming part of between-cohorts difference lies in the effects of parents' education and cultural status.

The last three columns of Table 5 display the estimated parameters in our preferred model for the cohort comparison. From this, we conclude that the effects of parents' occupational, financial, regional, and housing statuses are not only stable among cohorts, but also small. The effects of parents' educational and cultural statuses are substantially different among cohorts and thus point to historical change. However, the resulting parameters do *not* support the claim, from cultural reproduction theory, that family effects on educational attainment have been stable over the last four decades, nor that there is a trend to a growing importance of cultural resources. The effects of educational and cultural statuses of parents on educational attainment of the respondent are substantial in all cohorts, but gradually *decline* over time. This may confirm the idea, from reproduction theory, that the educational and cultural assets of parents determine their offspring's educational success. It also confirms the functionalist hypothesis that there is a trend towards more equality in schooling.<sup>3</sup>

# CONCLUSIONS

The results of our test of cultural reproduction theory for the case of Hungary in the early 1980s can be summarized in the following conclusions:

1. For each of the six dimensions of social inequality investigated (educational attainment, region of residence, occupational achievement, income, housing situation, and culture consumption), we have found substantial associations between parents' and respondent's positions. On all these dimensions, there is a tendency for respondents to occupy a position related to that of their parents. The correlations for parents' and respondents' status positions range from 0.6 for educational, regional and cultural status, via 0.4 for occupational and housing status, to 0.1 for financial status.

2. When the direct effects of parents' on sons' corresponding positions are assessed, the regional, educational, and cultural dimensions stand out. The transmission of regional status comprises not only the largest zero-order correlation between generations, but also the one that is least confounded with the other dimensions. However, given the mechanics of geographical mobility, this is a trivial result. At the other extreme, the intergenerational associations of occupational, financial, and housing statuses reduce to insubstantial sizes, when the other dimensions are statistically controlled. The transmission of the two remaining dimensions, educational and cultural status, is reduced, but has far from disappeared after controlling the other dimensions. Given the causal priority of education over the other statuses of the respondent, we conclude that the educa-

tional channel is the central transmitter of social inequality in Hungary. It is highly affected by family background, and strongly predicts achievements in the further life course, not only with regard to occupation, but also with regard to regional location, housing, financial, and cultural status.

3. In testing the hypothesis of cultural reproduction theory, that the disposal over cultural resources acquired in the parental family determines educational attainment, we have found a close correspondence between parents' educational and cultural statuses and educational attainment. However, in contrast to the expectations derived from this theory, there seems to be a decreasing importance of this phenomenon. The effects of parents' cultural resources diminished over three age cohorts.

In sum, our results have brought somewhat mixed evidence with respect to the two theoretical frameworks we have started with. In most respects, the process of stratification in Hungary does not conform to the expectations that a functionalist modernization point of view brings. Education plays a larger role in the distribution of societal rewards (in particular income, housing status, and cultural status) than would be expected. Occupational position and income bring less than one would expect under a traditional functionalist model. Educational attainment strongly depends upon parents' status characteristics, in particular on their educational attainment and on their cultural status. All these points justify a model of stratification in Hungary that portrays the stratification process as a conflict between culturally-defined groups, in particular between the higher educated and the less educated, and between groups that differ in cultural resources more generally, as indicated by their amount of culture consumption. In this respect, our reasoning that the cultural reproduction thesis, as developed for stratification in Western market economies, is even more applicable to a state socialist society, has stood up to the test. This is not only true for the traditional status-attainment model, but also for its extensions to the other dimensions of social inequality that we have included in our model. Regional location, housing, and culture consumption all show the influence of the educational and cultural background.

However, we have not found negative confirmation of the hypothesis that the importance of cultural resources is stable or even growing over time. On the contrary, our evidence suggests that in Hungary, at least until 1982, cultural influences in the stratification process were on their way down. This is much more in line with expectations from the modernization point of view than with the cultural reproduction thesis.

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## NOTES

1. Our extension of the traditional status-attainment model with three other dimensions has not covered all dimensions of interests. Although we have included two indicators of material position (housing, income), we would have liked to include more indicators of material consumption in our model. Also, revenues from the informal secondary economy could not be given the attention they deserve in the Hungarian situation. Even more important for the analysis of the stratification process in a state socialist society might be to add the dimensions of power to the status-attainment model, including supervisory or managerial status in the workplace and party membership and administrative positions in the political realm. The cultural reproduction thesis leads to the expectation that cultural resources may also be important in these respects (cf. Szelenyi 1987). Unfortunately, our present data do not contain information that would permit an extension of the intergenerational model in this direction.

2. This may have occurred during the early occupational career as well, when vocational or second-chance general training is intermitted with labor force participation. We think these moves are neglectable.

3. On first impression, this result seems to be at variance with that of Simkus and Andorka (1982), who—while assessing changes over the period 1920–1970 with help of cohort comparisons—did not find any substantial change in probabilities of educational success for persons of different social background, measured via father's occupational class. However, the results can be reconciled. First, it should be noted that our cohort comparison partly covers a more recent period in history. Simkus and Andorka (1982) compare birth cohorts from 1910 to 1950, whereas we have data on birth cohorts between 1920 and 1960. Secondly and more importantly, Simkus and Andorka (1982) used neither parents' educations nor parents' cultural status as predictor variables. Our regression equation strongly suggests that father's occupation is not an important variable for the prediction of educational attainment, once his (and mother's) education and cultural status are controlled. Father's occupation is only a limited proxy for the determinants of educational achievement in Hungary and is, therefore, not a sensitive indicator to trace trends in inequality of schooling. Finally, the dependent variable in Simkus and Andorka's (1982) analysis and our analysis differs, because they model continuation rates whereas we model the final level of educational achievement (cf. Mare 1981).

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