Mapping the Post-communist Class Structure

Findings from a New Multidimensional Hungarian Class Survey

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In this article, we define a schema for the class structure of Hungary, in which we consider a case for an Eastern-European capitalist system emerging from post-communist societies. Our schema is based on the findings of the Hungarian Class Survey, 2014. Using six measures of Bourdieusian economic, cultural, and social capital and applying the methodology of latent class analysis (LCA), we have constructed a model of eight LCA-based classes: upper class, cultural middle class, affluent middle class, young urban consumers, network-embedded rural workers, young drifters, middle-aged deprived, and the precariat. Hungarian society seems to be quite hierarchical but is also fragmented within the upper and lower strata. Status inconsistency in terms of possessing economic, cultural, and social capital is strongly present even for the middle

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classes. There is a clear divide in our class model between the upper four and the lower four classes, in terms of vertical and nonvertical aspects of social stratification. We also compare our new multidimensional class typology to the traditional occupation-based one and demonstrate its added value for class analysis in Hungary.

Keywords: class structure; post-communism; latent class analysis; Hungary; Bourdieu

Introduction

Class counts differently in various societies. While a range of inequalities is studied regularly, the "big picture" of the class structure at country level is presented less frequently. In this article, we intend to carry out this task for current Hungarian society. A general motivation is going beyond the occupation-based class approach, criticized heavily by the advocates of the "death of class" concept. Rather, the Bourdieusian approach to economic, cultural, and social capital has been chosen as the main mechanism for displaying class divisions in Hungary (the theoretical differences between these approaches are outlined below).

A more concrete incentive is that we have carried out a large-scale survey with the same technique of data collection as that of the Great British Class Survey Experiment.¹ This opportunity allows us to map the class structure of Hungary with information on cultural and financial capital and networking, which generally are not included in the "formal practice" of constructing classes on the grounds of division of labour. Nevertheless, this view provides more insight into the size and sociological features of elites, middle classes, and the precariat in society. This approach is less targeted by the "death of class" literature, and our current work also goes beyond previous Hungarian attempts by measuring social capital in an accurate way. The study extends the literature on the debates over classes by providing a concrete example on the post-communist ground.

Traditional or Renewed Class Analysis in Hungary

Class analysis has strong traditions in Hungary. In Hungary, the first empirical attempts were made by Zsuzsa Ferge,² who developed a class schema based on the division of labour in the 1960s. To some extent, this schema deviated from the classic Marxist approach as "power relations" were not the central conceptual or analytical focus; it was based on functionalist (Weberian) theory rather than on conflict (Marxian) theory. Her classification has become widely applied in statistics and sociology, as well as in the analysis of social mobility,³ and is still being used even

in very recent publications by the Hungarian Central Statistical Office (HCSO).⁴ Perhaps a good indication of the continuing relevance of Ferge's schema, also labeled as occupational (or in Hungarian terms, "work-character") groups, is that the categories are printed in regular questionnaires or used in prompts when researchers perform surveys about people's occupations.

After the collapse of communism, the empirical character of the Hungarian class analysis strengthened in contrast to the classic Marxist approach and international (Western) comparison became a more important issue; this made comparative measures more relevant. The HCSO adapted the four-digit ISCO system by the ILO for measuring jobs (previously, a Hungarian version was used). At the same time, the use of the so-called EGP class schema⁵ became a common practice in Hungarian sociology for comparative purposes. The HCSO published class distribution data from the Census according to the EGP schema, too, in addition to the regular Hungarian classification by Ferge, used for the purpose of displaying changes over time. More recently, a new version of the occupational class schema.⁶ Our analysis is in line with these Weberian traditions of Hungarian class analysis; we were more interested in empirical-based, survey-type, functionalist research, than in a Marxist, conflict theory–based class analysis.

Beyond Occupational Class

In summary, we can say that Hungarian sociology and statistics have a strong tradition of occupation-based class analysis. Nevertheless, going beyond this approach is not a complete novelty either. The most important resource is the so-called "Stratification Model Survey" from the 1980s.⁷ This research had a *multidimensional* character, distinguishing seven dimensions: division of labour, material circumstances, consumption, culture and lifestyle, housing, region, and (political) interest upholding. In the post-communist decades, little in the way of research has followed the footsteps of the Kolosi survey of the 1980s. One reason is that any investigation aiming to develop a multidimensional model of social class is expensive; it requires a longer questionnaire in comparison to one that focuses only on occupations and related information. An appropriately large sample is another requirement, and no Hungarian scholar has had the chance in the last twenty-five years to carry out a faceto-face survey with more than fifteen thousand respondents, as the Kolosi survey did. Even the Hungarian Central Statistical Office has not conducted any large-scale stratification and mobility surveys in the last twenty-five years, having done so most recently in the 1970s or 1980s. Kolosi tried to replicate his own work with more restricted data, defining only five dimensions: occupation, education, income, material consumption, and cultural consumption. Kolosi and Pósch carried out a latent

class analysis on variables for occupation, education, income, and household durable items on data from 2012.⁸ Fábián used data from 2014 on wages, household spending, loans, wealth, household durable items, and housing conditions.⁹

Though we believe that the occupational class schema is well argued and highly influential, in our present study we join the multidimensional approach as we think it gives a better insight into present Hungarian social inequalities. Our main line of criticism of the occupational approach is that it largely ignores crucial cultural and social aspects. The approach of our research was inspired by the Great British Class Survey (GBSC), a study with the ambition to exceed the influential Goldthorpe class schema and to develop a new, multidimensional classification system.¹⁰ Savage and his co-authors argue convincingly that (1) the occupational schema is not good enough at explaining social activities and social identities, and especially not cultural consumption; (2) income differences are increasingly important class-creating differences and the income variation within occupational scale ignores the complex cultural and symbolic ways that class differences operate, and therefore why culture should be included more carefully.

To settle these problems, similarly to Savage et al., in our study we follow the classic Bourdieusian division between economic, cultural, and social capital.¹¹ We argue that these types of capital, although they may be related to each other, are still different enough to be the basis for a more complex model of social class.

Nevertheless, beyond the British example, we also recall the fact that in Eastern Europe, Bourdieu's theory played an important role in the understanding of postcommunist transformation. The concept of convertible capital very much inspired sociological thinking in the transformation period and was highlighted in the work of Iván Szelényi.¹² Nevertheless, these works mainly dealt with the elite and its strategies in the transformation process. Empirical studies dealing with the whole class system have never used the Bourdieusian approach before.

Generally speaking, we found this approach a very interesting attempt to renew the study of class analysis by combining it with Bourdieu's theory.¹³ We consider it an approach that is appropriate for Hungarian society as it can more fully capture the nonwork-based aspects of class location than the occupation-based class analysis, which has been widely used in Hungarian sociology. Our goal, with a more sensitive measure of cultural capital and with the inclusion of social capital, is to operationalize the distinctive features of class location more profoundly.

Data and Methods

Following the survey technique of the GBCS, the Hungarian GfK has carried out a large-scale online survey. The questionnaire was available from January to April 2014 on the website of *Index* and *Heti Válasz*. Without strict sample drawing, we

received 13,650 completed online questionnaires. In addition, a survey of 1,000 individuals was also carried out by GfK Hungary in 2014. This survey was nationally representative for the population aged sixteen to sixty-nine. The polling institute used a stratified random sampling method, and a traditional paper-and-pencil face-to-face survey technique. The data were weighted by age, gender, and education level to correct the sample bias occurring as a result of nonresponding. Because of the skew characteristics of the online survey, we have decided not to use this data source in our analysis. Our analysis of the Hungarian class structure is instead based on the face-to-face random sample.

Our goal was to compile a questionnaire that properly measured Bourdieusian cultural, social, and economic capital.¹⁴ Following the methodology of Savage and his co-authors, we constructed two indices for all three dimensions of capital, and finally ended up with six indices to be used for the statistical analysis from which to derive our class model.

In the next part of the text, we introduce the six indices constructed for measuring class position and our method of extracting the classes. After that we briefly characterize the classes, and analyze the potential of this approach by using class as an independent variable in various regression models. In that part, we make comparisons with the classic occupational classification.

Cultural Capital

In line with the Bourdieusian approach, we focused on measuring cultural consumption for cultural capital. Thus, we definitely go beyond the traditional indicators of level of education or years in education; such variables were not used for constructing social classes but for characterizing them. We aimed to examine both highbrow and everyday cultural activities. The questionnaire consisted of a list of twenty-five activities, like going to theatres, museums, reading books, or watching TV, surfing the Internet, going to the pub, doing hobbies, etc. Responses were measured on a fourpoint answer scale: never, rarely, sometimes, and often. We also included other questions to measure holidays and eating-out practices as well as musical taste.¹⁵

The structure of the variables related to cultural and leisure activities was investigated by an exploratory factor analysis. The method resulted in two factors, which we identified as highbrow culture and emerging cultural activity.¹⁶ The factor of *highbrow cultural capital* was composed of going to the theatre, opera, classical music concerts, museums, and reading books. The *emerging cultural capital* factor included playing computer or video games, surfing the Internet, using social media, and meeting friends. As we suppose these two factors are not orthogonal, we carried out two separate principal component analyses with the related variables (for the factor loadings, see A1 and A2 in the appendix). The value of the Pearson correlation is 0.33 between the two cultural indices.

Social Capital

In the case of social capital, the position generator method was used, similarly to the approach of Savage and his co-authors,¹⁷ based on Lin.¹⁸ We asked respondents whether they knew a person in twenty-six different occupations. We decided to use a list that had already been applied in previous Hungarian position generator studies.¹⁹ Moreover, we extended the question and, in the case when the respondents knew someone in a given job, they were also asked to indicate whether this person could help or advise them if needed. We constructed our index by taking the average of these two, a broad and a more narrow network diversity index. Thus, the first index of social capital, *nexus diversity*, expresses more than simply the relationship, since it also reflects the everyday usefulness of the contact. The second index was based on the prestige of the occupations held by the person that the respondent knew and claimed to expect help or advice from. This measure shows that the different nexuses are not equally valuable in terms of social capital. For assigning prestige scores to the jobs, we used the Standard International Occupational Prestige Scale (SIOPS) values²⁰ and made a ranking of the occupations based on that. We calculated the mean of the prestige ranks of all the occupations and also of the really useable ones, and calculated their averages. A zero value was assigned if someone did not have an acquaintance in a given occupation. Then, we calculated the mean of these two variables and obtained an index that we called the mean prestige of the social contacts. The value of the Pearson correlation between our two indexes of social capital was 0.48.

Economic Capital

For measuring economic capital, we collected information on household income, property value, and savings. In the case of income, we decided to take into account the number of persons living in each household. Consequently, one indicator of economic capital in the GHCS is an index of per capita income. The index was computed by taking consumption units into account. Apparently, the total household income would not reflect the size of the household and the simple per capita index would not reflect the real composition of the household (adults + children), so individuals in the household were taken into account as different "consumption units."²¹ While computing the income variable, we had to solve a problem of missing data as well. In the GHCS data, about 26 per cent of respondents skipped the income question. This percentage is not particularly high; people in Hungary are often reluctant to report their economic situation.²² For respondents with missing income data, a household durable index was used for imputing the missing data.

The second indicator of economic capital was assets, based on property value and household savings. Unfortunately, missing data was a problem to be solved in this case, too: 29 per cent of respondents did not provide any value for their house or flat, and 17 per cent skipped the question on savings. For these respondents, the household durable index was also used for the imputation process. In the case of property

values, we also used external data sources on the selling and buying of houses in the area where the respondent lived. After this, these two variables were combined as *assets*. Those respondents who did not report any information on their financial situation (1%) were left out of the analysis completely. The value of the Pearson correlation between income and assets was 0.52.

Constructing the Classes. The six variables described above are good indicators to measure Bourdieu's three types of capital: cultural capital with highbrow culture and new emerging culture; social capital with nexus-diversity and the prestige rank of the reached occupations; and economic capital measured by income and assets.²³ Our main aim was to find how these six variables cluster Hungarian society. Here we used a bottom-up inductive approach, not a deductive method as commonly seen in traditional class analysis (like EGP). We seek to find the most parsimonious way to group the people into classes, finding those clusters where the respondents are similar to each other based on the given variables. Different clustering methods exist to solve this statistical problem. To create classes, we have used a latent class method,²⁴ as Savage and his colleagues did in the GBSC. To be more exact, we used a latent profile analysis technique²⁵ because of the continuous level of measurement of the six input variables. According to the Bayesian information criterion (BIC), we identified eight LCA-based classes.²⁶

Results

Measuring the economic, cultural, and social capital of the respondents produced a complex and interpretable structure for the eight LCA-based classes.²⁷ Table 1 identifies these classes and shows their distribution in the representative sample (see annex Table A3 for a more detailed description of the classes).

Table 2 shows the most important sociodemographic correlates of the eight LCAbased classes in Hungary. For this summary, we report on the level of education, position in a high-status job, place of residence, age, ethnicity, and social background. No significant gender differences were found in the class perspective.

Class membership is a kind of typical location, as described in the article. Consequently, a class dominated by older people may include some younger respondents, or a class with typically rural respondents may contain some persons who live in cities. So, the class titles try to refer to those characteristics or demographic variables that are highly overrepresented in that particular group. A more detailed description of the eight classes follows.

Brief Description of the LCA-Based Classes

Upper class. The topmost group is far above all the other classes in terms of resources. Its economic capital is especially outstanding. In addition, it also has the

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Class	%	Description
Upper class	4	By far the most economic capital, highest highbrow cultural capital, second highest emerging cultural capital, not very diverse, but very prestigious network
Cultural middle class	9	Very high social and highbrow cultural capital, but not as affluent as the group above
Affluent middle class	9	Second highest economic capital, high prestige of contacts but only average level of cultural capital
Young urban consumers	25	Lower income than the above groups, mean level of assets, but very high cultural capital, both highbrow and emerg- ing, few, but relatively prestigious, contacts
Network embedded rural workers	11	Rather poor economic and cultural capital, but much higher social capital, both in terms of diversity and prestige
Young drifters	22	Low income and assets, and highbrow cultural capital, but the third highest ranking emerging cultural capital
Middle-aged deprived	10	Second lowest income and highbrow cultural capital, lowest in emerging cultural capital, slightly better in assets and in nexus diversity
Precariat	10	Lowest score in almost every dimension, very poor, socially and culturally isolated, second lowest rank in emerging cultural capital

 Table 1

 Summary of Latent Class Analysis–Based Classes

highest highbrow cultural capital, the second highest emerging cultural capital, and a not very diverse but very prestigious social network. This is a highly educated group. In line with the general spatial and regional inequalities in Hungary, the upper class is concentrated in the capital. This class did not contain any Roma members. All these characteristics affirm that this is a rather closed and detached social group without many social contacts with those from other social strata. Table 3 shows that the upper class is overrepresented among the self-employed, highly educated professionals and managers. Highlighted numbers in Table 3 inform about significant overrepresentation (positive) or underrepresentation (negative), based on adjusted residual values calculated for the given cells.

Cultural middle class. Members of this class have significantly less income and wealth than the *upper class.* The real strength of this group is its social and cultural capital. Although its consumption of emerging culture lags behind some younger groups, its highbrow cultural capital is the second highest after the *upper class.* Moreover, the mean prestige of social contacts of the cultural middle class also approaches that of the *upper class.* What is really outstanding is the diversity of their networks, which is twice as high as that of any other group. Thus, the cultural middle class is a very well-embedded social group.

Class	% Tertiary Graduates	% Live in Budapest	% Ethnic Minority (Roma)	% with Professional Jobs and in Management	Mean Age	% from Professional or Senior Management Families
Upper class	40	39	0	51	46	42
Cultural middle class	49	7	2	35	46	29
Affluent middle class	37	20	0	32	45	30
Young urban consumers	30	35	1	21	38	18
Network-embedded rural workers	8	4	1	13	43	4
Young drifters	3	14	11	2	36	4
Middle-aged deprived	0	5	7	0	53	0
Precariat	0	11	22	4	48	2
Total	19	18	6	16	43	13

 Table 2

 Sociodemographic Correlates of Latent Class Analysis–Based Classes

Affluent middle class. In a sense, this group is the counterpart of the previous one. Its members have higher income and more assets than those of the cultural middle class. In the meantime, the networks of the *affluent middle class* members are not as diverse as those of the cultural middle class, and even the prestige of their contacts is slightly lower. They are only a bit over the mean in cultural consumption, which is somewhat inconsistent with their economic capital. Most members of the affluent middle class are older than forty, married, and work as professionals, managers, or entrepreneurs. As Table 3 clearly indicates, the affluent middle class is highly overrepresented among the self-employed. Ethnic minorities (particularly the Roma) are totally missing from the affluent middle class.

Young urban consumers. This is a sizable group: one quarter of the representative sample belongs to this class. The main feature of this group is the young age of its members: one third of this group is less than thirty years old. They might not have had enough time to acquire considerable assets, and also lack a diverse social network and work experience. They can also be characterized by very high cultural consumption, both in highbrow terms and also in emerging culture. This is a truly omnivorous group; one third of them are based in Budapest. Young urban consumers are overrepresented among qualified routine non-manual workers in administration and commerce.

Network-embedded rural workers. In the rank order of classes, after the group of young urban consumers, a clear divide can be observed in Hungary; all subsequent

	Precariat	Middle- Age Deprived	Young Deprived	Network- Embedded Rural Workers	Young Urban Consumers	Affluent Middle	Cultural Middle	Upper Class
No previous occupation, or occupation is missing	-2.1	-2.2	2.4	-0.9	3.9	-1.6	-1.5	-0.8
Farm labourers	2.4	4.6	-0.7	1.2	-2.6	-1.7	-1.6	-1.2
Unskilled workers	10.6	4.1	0.6	-0.4	-5.5	-3.7	-3.3	-2.1
Skilled workers	-0.7	3.6	3.9	2.4	-4.8	-1.7	-1.4	-2
Routine non- manual employees, sales and services	-3.1	-2.4	-0.4	0.6	3.3	-0.2	1.7	-0.3
Routine non- manual employees, administration and commerce	-4.2	-3	-1.3	-1.9	6	2.3	0.7	0.1
Professionals and managers, lower grade	-2.7	-2.8	-4	-0.5	2.2	2.8	4	3.6
Professionals and managers, higher grade	0.7	-2.2	-2.5	-0.9	1.1	1.8	0.7	3
Self-employed	-1.5	-1.2	-2.2	-0.5	-2.3	5.1	2.7	3.6

Table 3 Cross-Tabulation of Latent Class Analysis–Based Classes and Occupational Classes

classes are struggling for subsistence. The network-embedded rural workers are in a relatively better situation, as they seem to be able to compensate for their poor financial situation and low cultural capital by using social capital, because they have the second most diverse social network capacity. While lower social groups hardly participate in any civil or religious organizational activities, 22 per cent of this group are involved in such activities, which may either be a result or a reason as to why they are so highly embedded in social contacts.

The young drifters. This second biggest class has the second-worst score for assets and nexus diversity, but their emerging cultural capital is high, putting them in third place among the eight groups. This is probably due to their age, as they are the youngest group, with an average age of thirty-six years.

	Occupational Class	LC-based Class	Occupational Class after Controlling for Demographic Variables	LC-based Class after Controlling for Demographic Variables
Subjective class identification	303.6	274.8	73.5	64.1
Political influence	73	121	25.9	71.9
Political participation	22.2	65.7	16.2	52.4

 Table 4

 Wald Chi-square Statistics of Class Variables in the Fitted Regression Models

The young drifters spend plenty of time in front of a screen, surfing the Internet, playing computer and video games, without actually benefiting from social media. In a sense, this class is a negative counterpart of the young urban consumers in terms of their missing perspectives. The young deprived seem to be a diverse group. Some of them are still studying for better future prospects, while others are already at the periphery of the labour market; 19 per cent receive social assistance or are employed in public work projects. Their common feature, however, is state-dependency. Typically, 11 per cent of this group is Roma.

The middle-aged deprived. This is the second most disadvantaged class. They have the highest average age, 53 years. This group ranks low regarding all six indices except their assets; in this, they rank the fifth, most probably because they tend to have a relatively better housing situation, due to their older age.²⁸ Also probably attributable partly to their age, they have the worst emerging cultural capital. Their social background is lower status than that of the *young drifters.* Only 19 per cent of them had skilled worker fathers but several families were involved in agriculture: one third of them had agricultural worker fathers, the highest share among all classes. As Table 4 shows, the middle-aged deprived are typically blue-collar workers. They seem to be quite isolated regarding their social contacts; a fifth of them have never been to a friendly gathering in a home.

The precariat. This group represents the bottom 10 per cent of the Hungarian population, probably the most affected by long-term social exclusion. They are in the worst situation regarding all indices, except for emerging cultural capital, where they rank second worst after the previous class. This is the second-oldest group; they are mostly uneducated. This justifies their very low level of involvement in the labour market: only a quarter of them are employed, which is the lowest ratio, less than half of the sample average, while almost a third of them receive social assistance or unemployment benefit or work in public work schemes. They are overrepresented

among unskilled workers. The proportion of Roma in the group is almost 22 per cent (vs. 6–7 percent of the general population). This class is completely alienated from society; the minimum requirements of subsistence are missing, and they have been "left behind" by the social system.

Class as an Independent Variable

Table 3 clearly indicates some overlap between the classic occupation-based classes and our LC model-based classes, but the correlation is only modest between them. There are two ways to test the validity of a class model. We could find strong theoretical argumentation, or try validating it through empirical models. In the first part of our article, we have reasoned against classical occupational classes, and highlighted the necessity for new approaches in this field. But it is true that, unlike most occupational class models, we have used a bottom–up approach here, not a deductive scheme, so from a theoretical point of view, our argumentation could be opposed. So, in the last part of the article, we demonstrate the usefulness of the new class model as a predictor variable. If the new class model has stronger predicative power than the classical occupational class, it would be a strong pro-argument in the debate around validity. In order to analyze this, we have used the LC-based class model as the independent variable in our regression models, and compared the sizes of the effects with the occupational class variable fitted the same way.

Our database put a natural limit to these tests, as the available dependent variable set is quite limited from this perspective. Apparently, none of the indicators we used to construct the LC class model can be considered to be a dependent variable here. Thus, in total, three variables were feasible for this purpose; one is closer to the economic field, the other two are related to the political domain. As per definition, the LC-based class model estimates the network and cultural advantages and disadvantages better than the occupational classes; we have excluded these from the comparison.

The first dependent variable we used was a five-category subjective class identification (1 = lower class, 2 = working class, 3 = lower-middle class, 4 = middle class, 5 = upper class). As mentioned above, this is quite closely related to the economic evaluation of one's current life situation, but it also has cultural elements. The second target variable measures the capability of political influence. We have summed up three raw variables: how much the respondent is capable of influencing (a) neighbourhood-, (b) settlement-, and (c) country-level decisions. Higher value means stronger political influence. The third variable measures political participation. Here we have summed up six forms of political activity: (a) contacted a local politician, (b) contacted a regional politician, (c) contacted the mayor, (d) contacted a governmental deputy, (e) contacted an MP, and (f) contacted a minister. As the index was highly skewed (85 percent of the sample was not active based on these measures), we have recoded the variable into two categories: 0 = didn't contact anyone involved in politics, 1 = contacted at least one type of person involved in politics. To test the power of the LC-based class, we have run several regression models with the above-mentioned dependent variables. In all cases, four separate regression models have been fitted: (a) only using occupational class as the independent variable, (b) using both occupational class and demographic variables as independent variables, (c) only using LC-based class as the independent variable, and (d) using both LC-based class and demographic variables as independent variables after controlling for external factors. In the case of subjective class identification and political influence, we have fitted ordinal logistic regression models, and in the case of participation, we have fitted binary logistic regression models. Because of lack of space, we don't interpret the results of these models here, we only focus on the effect size of the class variables. The regression model parameters can be found in the appendix (Tables A4, A5, and A6).

The next table (Table 4) contains the Wald chi-square statistics of the class variables related to the various dependent variables. As the number of categories are the same in the occupational and LC-based class models and the dependent variable and the sample size is also the same, we could use this statistic to compare the effect size of the class model within each dependent variable. A higher Wald chi-square value means a stronger effect size for the given variable.

In case of subjective class identification, the effect size of occupational class is stronger than that of the LC-based class, which means that occupational class correlates more strongly with subjective class identification. As the working class, which is a separate category in the subjective class identification, has strong traditions in Hungary, this is not a surprising result.

However, regarding the political domain–oriented questions, the new LC-based class models perform (much) better. Furthermore, based on the regression models, when modeling the politics-oriented variables, the LC-based class model has stronger predicative power than the level of education or subjective living conditions. This is a quite important feature to be borne in mind when evaluating the validity of our new class schema.

Discussion

As we discussed in the review of Hungary's class analysis over the last few decades, there is an obvious lack of research in this field. In the past twenty-five years in Hungary, large-sample surveys of social stratification and mobility—conducted regularly between the 1960s and 1980s—have almost disappeared. Even though political control after 1989 ceased to affect class analysis, there were financial reasons as to why large-scale representative surveys were not carried out. This is particularly so for data collections aimed at Hungarian society in a multidimensional perspective, which would require more time and space. Moreover, class analysis also declined in Hungary and Eastern Europe, in general, because of ideological reasons; apart from the middle class, the existence of other classes did not fit well into the discourse of the construction of the new capitalist systems.²⁹ However, the relevance of the topic, not only for the academic community but also in terms of public opinion, is clear.

We believe that our analysis has important lessons for stratification emerging from post-communism. Firstly, an important advantage of the study is that it has applied the concept of Bourdieu and a class model based on comprehensively collected data about cultural, social, and economic capital. This theoretical framework has had an important consequence in the results: we were able to detect consistencies and inconsistencies in Hungarian society. Compared to recent findings by Kolosi and Pósch³⁰ and Fábián³¹ that were largely based on the extension of economic capital, we could describe a "richer shape" of society by taking cultural and network resources into account. Thus, our analysis revealed a more homogeneous "lower" or "deprived" class and could also meaningfully differentiate between low-income groups according to their cultural and social capital.

Secondly, the study also contributes to the scientific and public debate about the "Hungarian middle class," also present in other post-communist countries.³² To some extent, we can conclude that the wish to create a sizeable and stable middle class, supporting the economic and political post-communist transformation, has largely failed in Hungary. We found two groups that had similarities to a middle class: the *affluent* and the *cultural* groups, which are fragmented and inconsistent. The first group is economically affluent, and the other is more well-to-do in terms of culture and network. Unlike in the similar class study carried out in Britain,³³ neither of these groups can be characterized as matching the full profile of an *established* middle class (i.e., performing well enough in all three dimensions of capital). Rather, it is important to emphasize that even these Hungarian middle-class groups lag significantly behind the living standards experienced by the Western European middle classes.

Third, Hungarian society seems to be broken into two parts, according to several viewpoints. There is a clear divide in our class model between the four "upper" and the four "lower" classes in nearly all respects. In particular, the *middle-aged deprived* and the *precariat* looks as though it is in a hopeless social situation, almost entirely consistently. Another sign of the divide is the two "young" classes, the *young urban consumers* (class 4) and the *young drifters* (class 6); they clearly represent a favourable and unfavourable vision of the future for young generations in Hungarian society.³⁴ Additionally, there is an even more alarming ethnic aspect of the lower classes in Hungary. Being Roma clearly means being *drifters* or worse: 90 per cent of them belong to the three lowest classes, with 37 per cent of them being *precariat*. A further sign of a strong divide in the Hungarian class system appears in connection with geographical differences. The members of the four lower classes are underrepresented in Budapest. In general, residence in the capital or in other big cities makes a

higher class position more probable than living in small towns and villages. Even if rural areas have their own local professionals, most effort is made by the rural population to try to compensate for their economic and cultural disadvantages with network-reciprocity. A special form of this seems to be when young generations from the disadvantaged groups also consume "emerging" forms of culture. Nevertheless, the question can be raised as to whether gatherings with friends with similarly disadvantaged backgrounds or contacting them via Facebook serves for them as capital at all in the process of social mobility. As emerging cultural capital is strongly linked to younger age-groups, this is reflected in the age profile of the LCA-based classes: however, we consider this to be a meaningful difference regarding access to resources that are nowadays crucial and a dimension that can identify different social groups.

Fourthly, the lack of social mobility is another important finding in the analysis. A significant proportion of the upper and middle-class groups come from professional or at least white-collar families. Those who belong to lower classes are characteristically from uneducated and unskilled families; deprivation is reproduced across generations. We had no room to review previous Hungarian mobility studies, but our results are in line with the growing intergenerational status inheritance³⁵ or class inheritance³⁶ in Hungary after the collapse of communism. This is especially problematic if recalling the fact that not only the members of the lowest class (class 8) lives in a precarious situation in Hungary. Rather, the situation of the groups above the lowest, the *young drifters* and the *middle-aged deprived*, are already precarious, while the situation of the lowest class is assuredly futureless.

We supported the relevance of our new class typology by comparing its predictive power to that of the traditional occupation-based typology regarding class consciousness, political influence, and participation. In case of the latter two, the LC-based class membership proved to be significantly stronger than the traditional occupationbased models, or other important dimensions, like educational level or subjective living conditions, which may indicate the usefulness of such an approach in our changing societies.

Appendix

Table A1 Highbrow Culture Factor Loadings (Principal Components Analysis)

	Factor loadings		
Attending opera, ballet	.685		
Attending museum, exhibition	.784		
Attending classical music concerts	.765		
Reading books	.657		
Going to theatre	.822		
Variance explained by PC 1 (%)	55.5		

 Table A2

 Emerging Culture Factor Loadings (Principal Components Analysis)

	Factor loadings
Playing computer and video games	.737
Surfing on internet	.835
Visiting social media sites	.87
Attend social evening	.607
Variance explained by PC 1 (%)	59.1

Table A3 The Mean Values of the Six Standardized Indicators of Capital in the Eight Latent Class Analysis–Based Classes

Latent Classes	Income	Assets	Nexus Diversity	Mean Prestige of Social Contacts	Highbrow Cultural Capital	Emerging Cultural Capital
Upper class	2.440	2.931	0.415	1.246	1.393	0.417
Cultural middle class	0.333	0.154	2.036	0.8727	0.727	0.098
Affluent middle class	0.592	1.005	0.168	0.504	0.108	0.023
Young urban consumers	0.195	-0.038	-0.355	0.326	0.697	0.639
Network embedded rural workers	-0.438	-0.405	1.008	0.315	-0.314	-0.123
Young drifters	-0.355	-0.467	-0.484	-0.502	-0.488	0.275
Middle-aged deprived	-0.464	-0.104	-0.374	-0.609	-0.727	-1.256
Precariat	-0.660	-0.659	-0.873	-10.161	-0.964	-1.089
Total	0.001	-0.002	-0.001	0.004	0.003	-0.001

		Model 1: Occupational Class	Model 2: Occupational Class after Controlling for Demographic Variables	Model 3: LC-based class	Model 4: LC-Based Class After Controlling for Demographic Variables
Occupational	Self-employed	3.42**	2.24**	_	_
classes	Professionals and	3.70**	2.07**	_	_
Reference	managers, higher grade				
category: Unskilled	Professionals and managers, lower grade	4.08**	2.36**	_	_
workers	Routine non-manual employees, administration and commerce	3.15**	1.86**	_	_
	Routine non-manual employees, sales and services	2.39**	1.41**	_	-
	Skilled workers	1.28**	0.65**	_	_
	Farm labourers	-0.39	-0.52	-	-
Latent classes	Upper class	-	-	5.22**	2.93**
Reference	Cultural middle class	-	-	3.27**	1.86**
category:	Affluent middle class	-	-	3.48**	1.80**
Precariat	Young urban consumers	-	-	3.06**	1.25**
	Network-embedded rural workers	_	-	1.84**	1.29**
	Young deprived	-	-	1.45**	0.66*
	Middle-aged deprived	—	-	0.94**	0.51
Age		-	0.00	-	0.00
Gender $(1 = male,$	2 = female)	-	-0.01	-	0.09
Settlement type	Budapest (capital)	-	0.45*	-	0.53*
Reference	Chief town of a county	-	-0.19	-	-0.03
category: Village	City	-	-0.22	-	-0.28
Education	University/college diploma	-	1.46**	-	2.34**
Reference category: Max.	Grammar school/secondary school	-	0.90**	-	1.42**
primary	Vocational school	-	0.23	-	0.44*
Subjective living	Being quite well-off	-	3.62**	-	3.28**
standards	Getting along carefully	-	2.26**	-	2.17**
Reference category: serious financial problems	Barely making ends meet on monthly income	_	0.97**	-	0.96**
Roma minority (1	= no, 2 = yes)	-	-1.15**	-	-1.00**
BIC		2115	1959		1968

Table A4 Ordinal Logistic Regression Models (B Values)

Note: Dependent variable: subjective class identification. BIC = Bayesian information criterion. *p < 0.05, **p < 0.01.

		Model 1: Occupational Class	Model 2: Occupational Class after Controlling for Demographic Variables	Model 3: LC-Based Class	Model 4: LC-Based Class after Controlling for Demographic Variables
Occupational	Self-employed	1.17**	0.82*	_	
classes Reference	Professionals and managers, higher grade	1.52**	1.08**	-	_
category: Unskilled	Professionals and managers, lower grade	2.03**	1.64**	-	_
workers	Routine non-manual employees, administration and commerce	1.35**	1.10**	-	_
	Routine non-manual employees, sales and services	1.08**	0.86**	-	_
	Skilled workers	0.56**	0.30	-	_
	Farm labourers	0.63	0.45	_	-
Latent classes	Upper class	_	_	3.06**	2.91**
Reference	Cultural middle class	_	-	2.39**	2.34**
category: Precariat	Affluent middle class	-	-	2.30**	2.18**
	Young urban consumers	_	_	1.84**	1.76**
	Network-embedded rural workers	_	-	1.34**	1.38**
	Young deprived	_	-	0.91**	0.97**
	Middle-aged deprived	_	-	1.05**	1.07**
Age		_	0.01	_	0.01
Gender $(1 = male,$	2 = female)	_	-0.18	-	-0.11
Settlement type	Budapest (capital)	_	-0.17	_	-0.28
Reference	Chief town of a county	_	-0.93**	_	-0.95**
category: Village	City	-	-0.58**	-	-0.76**
Education	University/college diploma	_	0.00	_	0.11
Reference category: Max.	Grammar school/secondary school	-	-0.03	-	-0.10
primary	Vocational school	_	-0.04	_	-0.18
Subjective living	Being quite well off	-	1.15**	_	0.59*
standards	Getting along carefully	-	0.95**	_	0.75*
Reference category: amongst serious financial	Barely making ends meet on monthly income	_	0.64**	_	0.58*
Roma minority (1	= no, 2 $=$ yes)	-	-0.61	_	-0.47
BIC		2748	2775		2725

Table A5 Ordinal Logistic Regression Models (B Values)

Note: Dependent variable: political influence. BIC = Bayesian information criterion. *p < 0.05, **p < 0.01.

		Model 1: Occupational Class	Model 2: Occupational Class after Controlling for Demographic Variables	Model 3: LC-Based Class	Model 4: LC-Based Class after Controlling for Demographic Variables
Occupational	Self-employed	1.05**	1.14*	_	_
classes Reference	Professionals and managers, higher grade	0.41	0.58	-	_
category: Unskilled	Professionals and managers, lower grade	1.50**	1.65**	-	-
workers	Routine non-manual employees, administration and commerce	0.61	0.77	-	-
	Routine non-manual employees, sales and services	0.59*	0.82*	-	_
	Skilled workers	0.29*	0.12	-	-
	Farm labourers	1.03*	0.88	-	-
Latent classes	Upper class	-	-	4.30**	5.03**
Reference	Cultural middle class	_	-	4.10**	4.66**
category:	Affluent middle class	_	-	3.54**	4.17**
Precariat	Young urban consumers	_	-	2.42*	3.25**
	Network-embedded rural workers	-	-	3.39**	3.93**
	Young deprived	-	-	2.17*	2.75**
	Middle-aged deprived	_	-	3.18**	3.59**
Age		-	0.01*	0.01	
Gender $(1 = male,$	2 = female)	-	-0.12	-0.04	
Settlement type	Budapest (capital)	-	-1.45**	_	-1.36**
Reference	Chief town of a county	_	-2.12**	-	-2.06**
category: Village	City	-	-1.06**	-	-1.24**
Education	University/college diploma	-	0.11	-	0.04
Reference category: Max.	Grammar school/secondary school	-	0.37	-	-0.01
primary	Vocational school	-	0.23	-	-0.24
Subjective living	Being quite well off	-	0.43	-	-0.18
standards	Getting along carefully	_	-0.19	-	-0.34
Reference category: amongst serious financial problems	Barely making ends meet on monthly income	_	-0.34	_	-0.40
Roma minority (1	= no, 2 $=$ yes)	—	0.19	_	0.61
BIC		831	854	792	763

Table A6 Binary Logistic Regression Models (B Values)

Note: Dependent variable: political participation. BIC = Bayesian information criterion. *p < 0.05, **p < 0.01.

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Notes

1. The GBCS has been carried out by a group of academic researchers in Britain with the help of the British GfK and the BBC (M. Savage, F. Devine, N. Cunningham, M. Taylor, Y. Li, J. Hjellbrekke, B. L. Roux, S. Friedman, and A. Miles, "A New Model of Social Class? Findings from the BBC's Great British Class Survey Experiment," *Sociology* 47 [2013]: 219–50). We appreciate the activity of Dr Ákos Kozák, the CEO of the Hungarian GfK, for inviting our research group to accomplish the Hungarian equivalent of the class survey and working on the Hungarian fieldwork with the support of two Hungarian media partners, Index and Heti Válasz.

2. Zs. Ferge, "Társadalmi rétegződés Magyarországon [Social stratification in Hungary]," *Valóság* 9 (1966): 23–36; Zs. Ferge, *Társadalmunk rétegződése* [Stratification of our society] (Budapest: Közgazdasági és Jogi Könyvkiadó, 1969).

3. E.g., R. Andorka, *A társadalmi mobilitás változásai Magyarországon* [Changes in social mobility in Hungary] (Budapest: Gondolat, 1982); R. Andorka, "Half a Century of Trends in Social Mobility in Hungary," in *Social Reproduction in Eastern and Western Europe*, ed. J. Peschar (Groningen: Groningen University, 1990), 5–30.

Á. Huszár, ed., A 2011. évi népszámlálás. 15. A társadalom rétegződése [The 2011 Census, Vol. 15, Social Stratification] (Budapest: KSH, 2015).

5. R. Erikson, J. H. Goldthorpe, and L. Portocarrero, "Intergenerational Class Mobility in Three Western European Societies: England, France and Sweden," *British Journal of Sociology* 30, no. 4 (1979): 415–41; J. H. Goldthorpe, *On Sociology: Numbers, Narratives and the Integration of Research and Theory* (Oxford: Oxford University Press, 2000).

 Á. Huszár, "Foglalkozási osztályszerkezet (III)—Egy normatív-funkcionalista osztálymodell vázlata," *Statisztikai Szemle* 7 (2013): 718–44.

7. T. Kolosi, *Tagolt társadalom* [Stratified society] (Budapest: Gondolat, 1987); T. Kolosi, "Stratification and Social Structure in Hungary," *Annual Review of Sociology* 14 (1988): 405–19.

8. T. Kolosi and K. Pósch, "Osztályok és társadalomkép [Classes and Image of the Society]," in: *Társadalmi riport 2014* [Social Report 2014], ed. T. Kolosi and I. G. Tóth (Budapest: TÁRKI, 2014), 139–56.

9. Z. Fábián, "Társadalmi rétegek, fogyasztási státuszcsoportok Magyarországon [Social strata, consumption groups in Hungary]," in: Jól nézünk ki (...?!) Háztartások helyzete a válság után. Tárki Monitor Jelentések 2014 [As good as we look ...?! Circumstances of the households after the crisis], Tarki Monitor Reports 2014, ed. P. Szívós and I. G. Tóth (Budapest: TÁRKI, 2015), 128–42.

10. Savage et al., "A New Model of Social Class?"

11. P. Bourdieu, "The Forms of Capital," in: *Handbook of Theory and Research for the Sociology of Education*, ed. J. Richardson (New York: Greenwood Press, 1983), 241–58; P. Bourdieu, *Distinction: A Social Critique of the Judgement of Taste* (London: Routledge, 1984).

12. G. Eyal, I. Szelenyi, E. R. Townsley, and E. Townsley, *Making Capitalism without Capitalists: The New Ruling Elites in Eastern Europe* (London: Verso, 2001); S. Szelényi, I. Szelényi, and I. Kovách, "The Making of the Hungarian Postcommunist Elite: Circulation in Politics, Reproduction in the Economy," *Theory and Society* 24, no. 5 (1995): 697–722.

13. M. Savage, A. Warde, and F. Devine, "Capital, Assets and Resources: Some Critical Issues," *British Journal of Sociology* 56, no. 1 (2005): 31–48.

14. Bourdieu, "The Forms of Capital"; Bourdieu, Distinction.

15. In the case of musical taste, we benefited from the facility of online survey in the sense that respondents could listen to short details from different musical genres and answer whether they liked them on a five-point response scale.

16. The exact method was maximum likelihood with varimax rotation. The selection criterion for keeping a variable in the model was a factor weight of more than 0.4 in the rotated factor matrix. In addition, the variables were included only if their weight on one factor was at least double that on the other factor.

17. Savage et al., "A New Model of Social Class?"

18. N. Lin, Social Capital: A Theory of Social Structure and Action (Cambridge: Cambridge University Press, 2001).

19. R. Angelusz and R. Tardos, "A kapcsolathálózati erőforrások átrendeződésének tendenciái a kilencvenes években [Trends in the restructuring of social capital in the nineties]," in: *Társadalmi riport* [Social Report], ed. T. Kolosi, IGy Tóth, and Gy Vukovich (Budapest: TÁRKI, 1998), 237–56.

20. H. B. G. Ganzeboom, P. M. de Graaf, and D. Treiman, "A Standard International Socio-economic Index of Occupational Status," *Social Science Research* 21, no. 1 (1992): 1–56; H. B. G. Ganzeboom and D. Treiman, "Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations," *Social Science Research* 25, no. 3 (1996): 201–39.

21. For calculating per capita income, we followed the OECD modified equivalence scale: http://www.oecd.org/eco/growth/OECD-Note-EquivalenceScales.pdf.

22. E.g., *refusal* was 23 per cent and *do not know* answers a further 6 per cent on the income variable in the last Hungarian data collection for the European Social Survey in 2014, where income was enquired about with a similar prompt as in the GBCS/GHCS.

23. These six variables were standardized; the units of observation were the individuals in our analysis.

24. B. C. Bray, S. T. Lanza, and X. Tan, "Eliminating Bias in Classify-Analyze Approaches for Latent Class Analysis," *Structural Equation Modeling* 22, no. 1 (2015): 1–11. The latent class model is also referred as model-based clustering or (finite) mixture models. One of the disadvantages of classical clustering methods (as hierarchal or K-means) is that they use a heuristic approach and are not based on statistical probability models. Model-based clustering techniques provide an alternative solution for segmenting society. Simulation studies clearly corroborated that finite mixture modeling is better than traditional cluster analysis in detecting latent structures. Because of this, model-based clustering has been more and more utilized in the social sciences in recent years. J. K. Vermunt and J. Magidson, "Latent Class Cluster Analysis," in: *Applied Latent Class Analysis*, ed. J. A. Hagennars and A. L. McCutcheon (Cambridge: Cambridge University Press, 2002), 89–106.

25. The Latent Gold program was used for the calculations.

26. As in classic cluster techniques, one respondent is allocated only to one class in latent class analysis (LCA) models. The hardest part of this type of work is to specify how many classes fit the data best. In LCA, the researcher has better opportunities to find an optimal solution, compared to clustering methods, because there are several indicators for measuring the goodness of fit of the models. We used the Bayesian information criterion (BIC) to find out which was the statistically best solution. Goodness-of-fit indices depend on the sample size, so the model offers more classes on a bigger sample. That is why it is worth taking into account other aspects when defining the number of groups. We found the smallest BIC value for the twelve-class solution, but the improvement of the BIC level was already very small after the eight-class solution. We also had to take into account the size of the classes, because if they are too small, they can be problematic in the analysis. After these considerations, we decided to use the solution of eight LCA-based classes.

27. It is an open question whether our LCA-based classes are real social classes in the Marxist sense (i.e., shared political interests) or even in the Bourdieusian sense (shared habitus). Thus, we would like to emphasize that by the term *class* in empirical analysis, we always mean latent classes.

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28. Previous stratification research in Hungary (e.g., Kolosi, *Tagolt társadalom*) has also found an inconsistent group in Hungary under relatively bad social circumstances, but with relatively good housing situation. Mass privatization of apartments after 1990 contributed to this kind of fact. Moreover, housing mobility is low in Hungary; old couples or even old widowed people remain in big houses or apartments. G. Székely, "Lakáskörülmények (Housing conditions)," in: *A 2011. évi népszámlálás. 15. A társadalom rétegződése* (The 2011 Census. Vol. 15. Social Stratification), ed. Á. Huszár (Budapest: KSH, 2015), 97–109.

29. Å. Gagyi and M. Å. Éber, "Class and Social Structure in Hungarian Sociology," *East European Politics and Societies* 29 (2015): 598–609; D. Ost, "Stuck in the Past and the Future: Class Analysis in Postcommunist Poland," *East European Politics and Societies* 29 (2015): 610–24.

30. Kolosi and Pósch, "Osztályok és társadalomkép."

31. Fábián, "Társadalmi rétegek."

32. D. Ost, "Class after Communism: Introduction to the Special Issue," *East European Politics and Societies* 29 (2015): 543–64.

33. Savage et al., "A New Model of Social Class?"

34. We recall that Mills (2014 **[AQ: 1]**) criticized the too important role of age and life cycle in defining classes for the GBCS. Apparently, results from the GHCS show the same feature. Perhaps this is unavoidable, if the three Bourdieusian types of capital are applied to measure class position.

35. R. Luijkx, P. Robert, P. M. de Graaf, and H. B. G. Ganzeboom, "Changes in Status Attainment in Hungary between 1910 and 1989: Trendless Fluctuation or Systematic Change?" *European Societies* 4, no. 1 (2002): 107–40.

36. P. Róbert and E. Bukodi, "Changes in Intergenerational Class Mobility in Hungary, 1973-2000," in: *Social mobility in Europe*, ed. R. Breen (Oxford: Oxford University Press 2004), 287–314; E. Bukodi and J. H. Goldthorpe, "Market versus Meritocracy: Hungary as a Critical Case," *European Sociological Review* 26, no. 6 (2010): 655–74.

Author Biographies

[AQ: 2]