

# The Class Structure of Capitalist Societies

---

Volume I: A Space of Bounded Variety

Will Atkinson

First published 2020

ISBN13: 978-1-138-34253-8

## Chapter 3

---

### **Social Spaces**

(CC BY-NC-ND 4.0)

# Social spaces

---

The immediate task before us is to map out the targeted social spaces, in rare cases re-tracing contours previously sketched by others but in most instances charting entirely new territories. Will capital volume and capital composition emerge as the primary and secondary axes of difference? Will there be other, additional axes of importance, perhaps tapping into trajectory effects? Might volume of capital be effectively exhaustive of social differentiation, as older traditions of thought championing composite socio-economic scales assumed, pushing capital composition into marginality or irrelevance? It could well be, after all, that all seven variables in the CatPCA models load substantially onto a prime axis that accounts for almost all variance. Though the statistical strength of a principle of difference evidently cannot and should not be taken as a direct reflection of its social and sociological pertinence (examination of homologies with position-takings would be needed to confirm or confute that), an overwhelmingly unidimensional solution, with all vectors clinging tightly to the axis of the premier component like a multi-handed clock indicating midnight, would be very telling. Or might there be alternative axes in place of capital composition, or even capital volume, constituted by specific combinations of capital indicators, and what would the bearing of that *statistical* finding be on the constructed *conceptual* model of the social space? Finally, and crucially, are there any consistent patterns or regularities across the country models that indicate common structures of difference and domination, explicable political-economic variations or, perhaps, a world of national idiosyncrasy?

### The prime dimension

Analysis reveals, first of all, that *in each and every case* the space of social difference can be effectively modelled as a three-dimensional system of oppositions and, additionally, that those oppositions bear striking resemblances across national samples (Table 3.1).<sup>1</sup> The prime axis of differentiation, to start with, has, judging from factor loadings (those above 0.4 being definitive), a common character (Table 3.2). The most consistently powerful

correlation is with the respondent's education level, followed by number of books in the family home. There seems to be a clear relationship, then, between acquired and inherited cultural capital, an inference seemingly confirmed by the vectors of parental class position along the axis. Father's occupation, which is, as we know, better understood as a broad indicator of social capital (past and/or present) than inherited cultural capital per se given its internal structure, has a substantial factor loading on Axis 1 in all national models, most notably those for Austria and Italy, though the association is weakest (though still notable) in Slovakia and at the weaker end of the spectrum in several other Eastern European states (Estonia, Latvia, the Czech Republic), the Far East and the US. In the case of the Far East, especially Taiwan and South Korea, this might reflect the rapid economic development, industrial change and educational expansion of the later twentieth century, creating starkly different fields of possibilities for successive generations, though it must also be borne in mind that doxic notions of honour have long compelled even the poor to invest what meagre resources they have, at great sacrifice, in the schooling of their children (see Seth, 2002; Oh, 2010; Jung and Gil, 2019). In the case of the US and Eastern Europe, it perhaps fits with the general image of greater social fluidity in these nations (Breen, 2004; Bukodi and Goldthorpe, 2018), though educational expansion and, in the case of Eastern Europe, economic restructuring and the new possibilities they entail must be borne in mind too.

Mother's occupation – which is, as previously mentioned, more indicative of inherited cultural capital than father's class is – is slightly more variable. In the majority of samples it does have a positive correlation with the principal axis above 0.4. Only in the Russian model is it greater than 0.7, but it registers a relatively large factor loading in most of the other post-socialist nations (Latvia, Poland, Estonia, Slovakia), as well as Israel and Australia. In most of these cases, in fact (Poland is the exception, but only just), mother's class is more important than father's class on the axis. It could well be, for the post-socialist cases, that this effect is the consequence of traditionally high rates of female workforce participation in these countries. In a minority of samples, however, mother's occupation plays a lesser, or different, role. In four nations – Switzerland, Germany, Japan and the US – it bears only a minor factor loading, and in two more – South Korea and, especially, Taiwan – it has a notable *negative* relationship with the axis. The peculiar relationship in the latter two cases would seem to be linked to the atypical positioning of having a mother who did not work when the respondent was a teen. While it is not uncommon for this category to sit above having a mother in routine manual work in the space, and/or just above the axis origin, in these two models the coordinates for having a non-working mother, a populous category, are substantially higher on the positive side of the axis (0.2 in both cases) and considerably higher than the category for routine work (−0.38 and −0.36 in South Korea and Taiwan respectively) than

Table 3.1 Eigenvalues and inertia in the models

Country	Axis 1		Axis 2		Axis 3		Cumulative inertia
	Eigenvalue	Inertia (%)	Eigenvalue	Inertia (%)	Eigenvalue	Inertia (%)	
Australia	2.54	36.3	1.64	23.4	0.88	12.6	72.2
Austria	2.67	38.2	1.71	24.4	0.87	12.4	75.0
Belgium-Flanders	2.92	41.7	1.52	21.7	1.02	14.6	78.0
Czech	2.55	36.4	1.28	18.3	0.89	12.7	67.4
Denmark	2.43	34.7	1.74	24.8	0.89	12.8	72.3
Estonia	2.59	36.9	1.40	20.0	1.01	14.4	71.4
France	2.60	37.1	1.52	21.7	1.05	14.9	73.7
Germany	2.63	37.5	1.45	20.6	1.09	15.6	73.8
Iceland	2.01	28.8	1.71	24.5	1.03	14.7	67.9
Israel	2.62	37.5	1.76	25.1	1.03	14.7	77.3
Italy	2.76	39.4	1.63	23.2	0.92	13.2	75.8
Japan	2.40	34.3	1.66	23.7	1.29	18.4	76.4
Latvia	2.45	35.0	1.52	21.7	0.99	14.1	70.9
New Zealand	2.42	34.6	1.55	22.1	1.06	15.2	71.9
Norway	2.09	29.8	1.82	26.0	0.95	13.6	69.5
Poland	2.99	42.7	1.19	17.0	0.96	13.8	73.5
Russia	2.45	35.1	1.37	19.5	1.10	15.7	70.2
Slovakia	2.80	40.0	1.43	20.5	0.98	14.0	74.6
South Korea	2.65	37.8	1.38	19.8	0.97	13.8	71.4
Sweden	2.53	36.1	1.55	22.1	1.01	14.4	72.6
Switzerland	2.36	33.6	1.56	22.3	1.03	14.7	70.6
Taiwan	2.81	40.2	1.25	17.8	1.04	14.9	72.9
US	2.59	37.0	1.54	21.9	0.94	13.4	72.4
Average	2.56	36.6	1.53	21.8	1.00	14.3	72.7

elsewhere. Whatever the possible social factors that might coincide with this – cultural expectations over gender roles and the degree of familial distance from necessity required for mothers to take time out of work – or its specific relationship to the positioning of the categories across other axes, to be explored later, the important point is that having a mother in routine manual work still corresponds with the lower end of the dimension and a mother in non-manual employment – professional-managerial employment is exceedingly rare in both samples – with the top end (for South Korea and Taiwan, the category coordinates are 0.59 and 0.91 respectively).

All in all, looking at the relationship between the variables so far discussed, the typical order of importance is education → books → father's class → mother's class, though there are some minor deviations. In other words, the most important elements are acquired cultural capital, in the form of education level, and probably the most effective measure of inherited cultural capital in the form of books in the childhood home. Parental

Table 3.2. Factor loadings on Axes 1 and 2

Country	Axis 1										Axis 2									
	Education	Books	Mother	Father	Income	Savings	Home	Education	Books	Mother	Father	Income	Savings	Home						
AU	0.80	0.68	0.66	0.65	0.70	0.11	0.27	-0.11	-0.22	-0.24	0.00	0.10	0.88	0.86						
AT	0.80	0.83	0.63	0.75	0.46	0.38	0.19	-0.02	-0.31	-0.32	-0.28	0.55	0.72	0.79						
BE-FL	0.88	0.80	0.40	0.63	0.74	0.45	0.44	-0.07	-0.35	-0.47	-0.41	0.24	0.66	0.71						
CZ	0.76	0.63	0.54	0.55	0.53	0.63	0.56	-0.09	-0.34	-0.49	-0.47	0.26	0.56	0.56						
DK	0.76	0.69	0.62	0.64	0.67	0.25	0.29	0.01	-0.26	-0.42	-0.26	0.23	0.82	0.84						
EE	0.73	0.72	0.67	0.55	0.57	0.48	0.48	-0.10	-0.34	-0.42	-0.33	0.21	0.69	0.69						
FR	0.77	0.72	0.41	0.70	0.69	0.40	0.44	-0.25	-0.44	-0.31	-0.30	0.38	0.67	0.70						
DE	0.76	0.71	-0.05	0.68	0.67	0.58	0.55	-0.37	-0.49	-0.38	-0.39	0.36	0.51	0.62						
IS	0.73	0.58	0.46	0.58	0.62	0.31	0.34	-0.18	-0.24	-0.54	-0.29	0.30	0.73	0.79						
IL	0.77	0.72	0.70	0.57	0.70	0.37	0.28	-0.22	-0.20	-0.45	-0.21	0.33	0.74	0.88						
IT	0.85	0.83	0.64	0.72	0.59	0.24	-0.06	0.07	-0.19	-0.37	-0.24	0.62	0.76	0.66						
JP	0.78	0.74	0.17	0.53	0.70	0.49	0.46	-0.41	-0.37	-0.33	-0.23	0.04	0.75	0.80						
LV	0.74	0.65	0.69	0.56	0.58	0.42	0.44	-0.18	-0.38	-0.22	-0.16	-0.09	0.80	0.79						
NZ	0.64	0.69	0.55	0.61	0.62	0.46	0.51	-0.35	-0.31	-0.45	-0.13	0.08	0.75	0.73						
NO	0.67	0.67	0.51	0.66	0.54	0.21	0.40	-0.08	-0.32	-0.48	-0.33	0.51	0.75	0.74						
PL	0.83	0.80	0.66	0.68	0.66	0.44	0.37	0.04	-0.35	-0.43	-0.32	0.49	0.58	0.45						
RU	0.80	0.71	0.72	0.66	0.57	0.20	0.02	0.08	-0.31	0.04	-0.11	0.04	0.82	0.76						
SK	0.84	0.81	0.63	0.45	0.72	0.44	0.35	-0.21	-0.12	-0.39	-0.26	0.06	0.72	0.80						
KR	0.77	0.62	-0.34	0.55	0.73	0.60	0.60	-0.14	-0.32	0.63	-0.53	0.27	0.49	0.53						
SE	0.75	0.74	0.48	0.70	0.68	0.28	0.40	-0.25	-0.35	-0.28	-0.24	0.36	0.73	0.75						
CH	0.79	0.62	0.35	0.63	0.59	0.52	0.48	-0.21	-0.41	-0.39	-0.46	0.32	0.64	0.69						
TW	0.77	0.71	-0.43	0.56	0.67	0.70	0.54	-0.28	-0.32	0.38	-0.40	0.13	0.53	0.69						
US	0.72	0.55	0.20	0.55	0.74	0.68	0.66	0.33	0.48	0.60	0.45	-0.17	-0.54	-0.56						
Ave.	0.77	0.71	0.43	0.61	0.64	0.42	0.39	-0.16	-0.32	-0.30	-0.30	0.26	0.69	0.71						

Note: Variables with loadings greater than +/-0.4 (before rounding) are highlighted.

class positions, with all their ambiguities and homogenisations at this level of aggregation, are secondary. Nevertheless, they consolidate the interpretation that inherited capital is important to this axis, cultural capital in particular but not necessarily exclusively.

Yet there is more. Indicators of economic capital also load on to the first axis above the threshold of 0.4, and the most notable in this regard is household income. It is, in fact, more important to the axis than parental class when looking at the cross-national aggregate pattern, though its order of importance differs from nation to nation. Its highest loadings are in the models for the US, South Korea, Slovakia, Flanders and Australia, but its importance is less pronounced – though still substantial – in Austria, the Czech Republic, Estonia, Italy, Latvia, Norway, Russia and Switzerland. In only three models (Australia, South Korea and the US) does its loading surpass that of books in the family home, and in the US model alone does it exceed that of even education level, making it the single most important variable to the dimension. Nevertheless, the take-home finding is the strong interrelationship, or correspondence, between acquired and inherited cultural capital, on the one hand, and household income, on the other hand. This indicates not only a causal relationship between social origin and success within the education system – social reproduction, in other words – but a consistent nexus, perhaps mediated by the inherited/acquired cultural capital link, between social origin and earnings (one's own and/or those of a cohabitating partner).

Indicators of wealth – value of savings and domestic property – are less consistent features of the prime axis of differentiation. They correlate positively with the axis in all cases but one, Italy, where the coordinate for home ownership sits almost on the barycentre. Savings are important to the dimension in 14 cases, but while they yield a particularly high factor loading in Taiwan and the US they typically have a correlation of between 0.4 and 0.5 and, in many cases, 95 percent confidence intervals extend below the 0.4 threshold. Home value follows a very similar pattern, having a factor loading above 0.4 in 13 cases (not necessarily the same cases where value of savings was important) and even then it is usually fairly low compared to the other indicators of capital. Overall, therefore, there is a case to say that the prime axis indicates differentiation by capital volume in just over half the cases, with wealth playing a secondary role, but that in all others the axis is perhaps more properly characterised as *cultural capital plus income*.

The picture becomes somewhat clearer, however, if we move beyond factor loadings to examine the *relative contributions* of variables to the axis, thus distinguishing major ('explicative') indicators from minor ('explained') ones (Table 3.3). Looking for those indicators bearing an above-average contribution, it quickly transpires that education typically remains the most important piece of the puzzle, explaining between a fifth and a quarter of the inertia, followed by books in the family home. Only in the US is the

Table 3.3 Relative contributions of variables to axes 1 and 2 (% of inertia)

Country	Axis 1					Axis 2						
	Education	Books	Mother	Father	Home	Education	Books	Mother	Father	Income	Savings	Home
AU	25.3	18.4	17.1	16.4	19.5	0.5	2.9	3.6	0.0	0.6	47.3	44.7
AT	23.6	25.9	14.6	21.3	7.9	5.4	1.3	5.8	4.4	17.6	30.2	36.5
BE-FL	26.2	21.8	5.5	13.7	19.0	7.0	6.7	14.4	11.1	3.7	28.9	33.5
CZ	22.7	15.4	11.3	12.0	11.1	15.5	12.1	18.8	17.2	5.2	24.4	24.9
DK	23.9	19.3	15.6	16.8	18.3	2.5	3.5	10.2	3.7	2.9	38.6	40.6
EE	20.8	20.0	17.1	11.9	12.6	8.8	8.8	12.5	7.6	3.0	33.9	34.0
FR	22.9	19.9	6.5	18.7	18.4	6.2	7.4	6.3	5.9	9.8	29.7	32.0
DE	22.1	19.1	0.1	17.4	17.1	12.8	11.4	10.2	10.4	8.9	17.6	26.9
IS	26.2	16.7	10.4	16.6	19.3	4.8	5.9	17.0	5.0	5.2	30.8	36.8
IL	22.7	19.9	18.5	12.5	18.4	5.1	3.0	11.4	2.5	6.3	31.1	43.6
IT	26.4	25.2	14.7	18.9	12.5	2.1	0.1	8.5	3.6	23.3	35.1	27.0
JP	25.2	22.7	1.2	11.8	20.4	10.1	8.7	11.4	3.3	0.1	34.1	38.1
LV	22.1	17.3	19.5	12.6	13.6	7.0	8.0	6.4	1.8	0.5	41.5	41.2
NZ	17.1	19.6	12.5	15.4	15.7	8.8	10.9	3.3	1.2	0.5	36.4	34.6
NO	21.6	21.5	12.2	20.9	14.0	2.2	7.6	13.2	1.2	0.5	30.7	30.0
PL	23.1	21.5	14.5	15.4	14.7	6.4	4.5	12.8	6.0	14.5	28.3	17.3
RU	26.0	20.5	21.2	17.5	13.2	1.5	0.0	15.8	8.4	20.1	28.3	17.3
SK	25.2	23.5	14.3	7.1	18.7	7.0	4.2	0.1	1.0	0.1	49.2	42.2
KR	22.3	14.4	4.2	11.4	20.3	13.7	13.6	10.3	4.7	0.2	36.4	44.1
SE	22.5	21.8	9.0	19.2	18.1	3.2	6.3	28.3	20.2	5.2	17.1	20.4
CH	26.2	16.3	5.1	16.6	14.8	11.3	9.6	5.1	3.6	8.5	34.4	36.1
TW	20.8	17.9	6.6	11.2	15.7	17.4	10.5	9.9	13.6	6.7	26.0	30.2
US	19.7	11.6	1.5	11.5	21.3	17.6	16.7	11.5	12.6	1.4	22.3	37.6
Ave.	23.2	19.6	11.0	15.1	16.3	7.7	7.1	11.2	7.0	2.0	18.9	20.7
										6.4	31.4	33.6

Note: Contributions above the axis average are highlighted.

latter not an explicative variable. Parental class, however, is more inconstant. Mother's class contributes above average to the axis in only ten cases, usually at a lower level than books and acquired cultural capital (Latvia and Russia are exceptions), while father's class is explicative in 13 cases and, again, usually to a lesser extent than education level and books in the family home (Switzerland is a marginal exception), though in some cases there is more parity.

Examining the relative contribution of household income to Axis 1 reveals that it remains important in 16 cases, though to varying extents. It is typically, though not always, a little less important than education and books in the family home to the axis. Indicators of wealth, however, are now disclosed to be almost universally *explained* variables on the axis, with a characteristic contribution of around 7 percent. In only three models (for the Czech Republic, Taiwan and the US) are savings explicative and in only the US space is home value key (and more so than inherited cultural capital). What this means, therefore, is that the prime axis of differentiation can only reasonably be characterised as proxying capital volume in three cases. These are (i) the Czech Republic, where acquired cultural capital (education), inherited cultural capital (books) and economic capital (savings) all play an active role; (ii) Taiwan, where education, books, income and savings are explicative; and (iii) the US, where education, income, savings and home ownership are key. Education plays the lead role in the first two cases, while in the US the axis is really defined by economic capital and acquired cultural capital.

Six of the models, it transpires, now have a prime axis defined exclusively by cultural capital, both acquired and inherited, even if the contribution of father's class to the axis may indicate something else too (and it should be borne in mind that income is often very close to being explicative). These are Austria, Estonia, Italy, Latvia, Norway and Russia. The remainder of the models possess a prime axis that can be characterised as cultural capital plus income, with income typically being of lesser importance than education and books in the family home but as important as or more important than parental class.

## The second dimension

What, then, of the second dimension of difference? The most striking feature, revealed by even a quick glance over the factor loadings, is the predominance of precisely those variables least important to the first axis: savings and property value. There is some variation across samples, with factor loadings for both indicators being higher in some models than others, but their association with the axis is nonetheless clear and uniform. The relationship with income, however, is less powerful or consistent. It is usually correlated positively with the dimension – the exceptions are



the US, where the whole axis is flipped, and Latvia, where the coordinate sits close to the origin – but only fairly weakly. In only four cases does it breach the threshold of 0.4, and in only one (Poland) is its factor loading greater than that of either savings or property value.<sup>2</sup> For most samples, therefore, the ‘positive’ character of this dimension is defined by higher holdings of *wealth*.

Looking across the indicators of social and cultural capital, on the other hand, the first finding is that these are almost all *negatively* correlated with the axis, indicating, perhaps, an opposition according to capital composition. There are exceptions: in the models for Denmark, Italy, Poland and Russia the correlation of education level with the axis is positive, but so close to the origin as to render it effectively neutral on the axis. Taiwan and South Korea also continue their particularity *vis-à-vis* mother’s class by seeing it load positively on the axis, contrariwise to father’s class, and substantially so in the case of South Korea. Again, however, this is related to the ordering of the categories, with having a mother who did not work falling in the middle, and in both cases, as might be expected, having a mother in non-manual work corresponds with the low-wealth/high cultural capital pole of the axis (vector coordinates for this category are  $-1.1$  and  $-0.8$  for the Korean and Taiwanese models, respectively) and having a mother in routine manual work correspond with the high wealth/low cultural capital end (coordinates  $0.7$  and  $0.3$ ).

Otherwise, however, education level, books in the family home and class of both parents follow vectors proceeding in the opposite direction from those of wealth possession. That said, the correlations are not usually strong. Only in Japan does the loading of education level on the axis exceed  $-0.4$ , and in most cases it is relatively close to the origin. Number of books has a

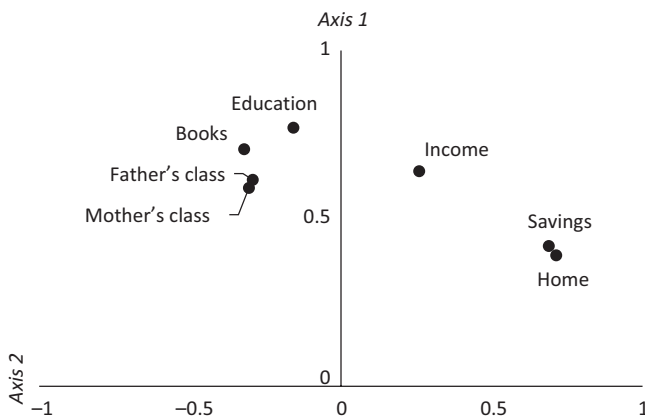


Figure 3.1 Average factor loadings on axes 1 and 2.

higher average negative loading, but only becomes notable in four samples – those for France, Germany, Switzerland and the US – and in no model does the figure go below  $-0.5$ . The pattern is similar for father's class, where the variable correlates negatively with the axis to a substantial degree only in the models for Flanders, the Czech Republic, South Korea, Switzerland and (once flipped) the US, and only below  $-0.5$  in South Korea. Mother's class position plays a more active role, however, being a key element in 11 models, though again the loading is only below  $-0.5$  in two models. All in all, then, there are 15 instances where the case could reasonably be made that the second axis of differentiation taps specifically into capital composition, though mainly via inherited cultural capital. In only four of those, however, does more than one indicator of cultural capital play an important part in co-defining the axis alongside economic capital: Flanders, the Czech Republic, Switzerland and the US. In the remaining models the second axis is most accurately characterised as one of low/high wealth, though the tendency for negative correlation with indicators of cultural capital, particularly inherited cultural capital, cannot be ignored.

Examination of relative contributions of variables to the axis inertia once again sharpens our view of what is going on. First, as might be expected, value of saving and property are by far the strongest contributors across almost all models. Both typically account for between 20 and 40 percent of the variance, with the figures being particularly high in the model for Australia, Latvia and Russia. There is usually parity between the two, moreover. In the cases of Germany, Israel, Slovakia and Taiwan the value of property becomes noticeably more explicative than savings value, and in Italy and Poland the reverse relationship emerges, but otherwise the two indicators of wealth can be said to be almost equal partners in defining the second axis across most models. Second, continuing the theme that transpired when examining the factor loadings, household income is generally far less important to defining the axis than the other indicators of economic capital. In the same four models where it loaded above 0.4 – Austria, Italy, Norway and Poland – it can be considered explicative, though only in Poland is it more important than an indicator of wealth. Elsewhere it is most certainly an explained variable.

Third, the importance of economic capital to the axis is so great that wealth becomes exclusively explicative, or explicative in conjunction with income alone, in 16 cases. In the remainder, one or more indicator of cultural capital also becomes explicative. In no cases does education contribute above average to the axis, and in only two does the variable for books in the family home. Father's class plays a role in the Czech space and the Korean space, but a more frequently explicative indicator of inherited cultural capital is mother's class, which contributes above the average in six models, including the Czech and US spaces again but also South Korea, where we have seen the negative loading hides the same patterning of mothers in manual

and non-manual work as observed elsewhere. In sum, the second axis can be argued to approximate capital composition in only seven cases, and in only the US, the Czech Republic and South Korea (arguably Germany too) is it not heavily weighted by wealth. In all other instances the axis is confirmed to be one distinguishing high/low wealth, even if this tends to coincide with, and ‘explain’, inverse vectors for (inherited) cultural capital.<sup>3</sup>

### **The statistical model and the constructed model**

In only a handful of cases, then, is the classic structure of capital volume and capital composition proxied by the first two dimensions of the statistical models. The typical space is, instead, characterised by a prime axis distinguishing those with high cultural capital and income from those with low cultural capital and income and a secondary axis polarising those with high wealth holdings and those with low wealth holdings. If we plot the average factor loadings in a two-dimensional space we can see the importance of education to the first axis and wealth to the second axis (Figure 3.1). We also see the weak – but still positive – correlation of the wealth variables with the first axis and their strong relationship with the second axis. The close correspondence of indicators of inherited cultural capital, furthest to the left, and their opposition to indicators of wealth becomes visible too. Finally, it becomes clear that household income, while strongly associated with the first axis and only weakly related to the second axis, still, on average, sits *between* the indicators of wealth and cultural capital, following a vector in what might be described as a roughly north-north-easterly direction.

Are we to infer from this arrangement of vectors that the major principle of difference and domination in the societies studied is not, strictly speaking, volume of capital but cultural capital plus income? Is the secondary principle of difference not really capital composition but high and low personal wealth, which only modestly runs counter to holdings of cultural capital? Could the latter be indicative of the increased prominence across capitalist societies of the ‘super rich’ or ‘super privileged’ of the kind recently spotlighted by several analysts (Dorling, 2014; Keister, 2014; Picketty, 2014; Sayer, 2015; Hay and Beaverstock, 2016)? Possibly, though the fact that capital composition does emerge on the second axis in the model for the US, a social order particularly polarised by income and wealth holdings, gives grounds for caution. Indeed, it would be foolhardy to jump too quickly from the statistical model to the constructed model generally, since the former is beholden to specific technical features like the number and nature of variables and variable categories – with indicators of subject studied, parental education, share ownership and so on, and with different pre-given cut points for the indicators of economic capital, the models could have come out

differently – not to mention the modest sample sizes. There is also the little matter of logic. Those with higher inherited cultural capital and income *and* higher wealth are still surely the most advantaged in a social order – the furthest from necessity, one might suppose, facing specific experiences and opportunities and acquiring certain interests and dispositions in adaptation – while those with neither are the least advantaged, forming the major principle of social difference, and those with a high stock of one type of capital but not the other are advantaged to a lesser degree than those who hold both and in different ways.

There is, however, another reading of the spaces produced by the statistical analyses – one that does not directly equate quantitatively deduced axes with salient social principles of difference, that does not mistake the model of reality for reality itself and which recognises that empirically derived representations based on specific techniques and measures can produce approximations of greater and lesser detail and distortion. For ultimately, if it can be said that in most cases the first axis of the models tends to distinguish primarily high/low cultural capital and the second primarily high/low wealth, with income cleaving somewhere between, then *ipso facto* there is, running through the middle of those axes, a hypothesised vector for capital volume and, orthogonal to that, one for capital composition. In other words, the clouds of individuals underpinning the detected axes are logically still *structured according to capital volume and capital composition*, even if that fact is hidden or obscured by the operations of the chosen statistical technique.<sup>4</sup>

The gap between statistical axes and hypothesised axes is a question of degree, however, since the patterning of variables along the principal components and the extent to which they deviate from the classic volume/composition dichotomy vary. A simple operation can, in fact, give us some handle on this. By taking the mid-point on both axes between the mean loading of the indicators of cultural capital, on the one hand (disregarding mother's occupation in Taiwan and South Korea), and the mean loading of indicators of economic capital, on the other hand, we can approximate the vectors for capital volume and (positing a perpendicular relation) capital composition. With the help of some basic geometry and trigonometry we can thus calculate the degree of clockwise rotation required to move from the statistical axes to the hypothesised axes of capital volume and composition, or the extent of 'tilt' within each of the statistical models. Thus it transpires that the average tilt is 13.5 degrees in the space, but that it varies considerably from model to model (Figures 3.2 and 3.3). As might be expected from what we have seen so far, the rotation is smallest in the US and the Czech Republic, but also South Korea and Taiwan as well as Germany. The tilt is most pronounced, meanwhile, in Italy, Russia, Australia, Austria, Israel and many of the Nordic countries.

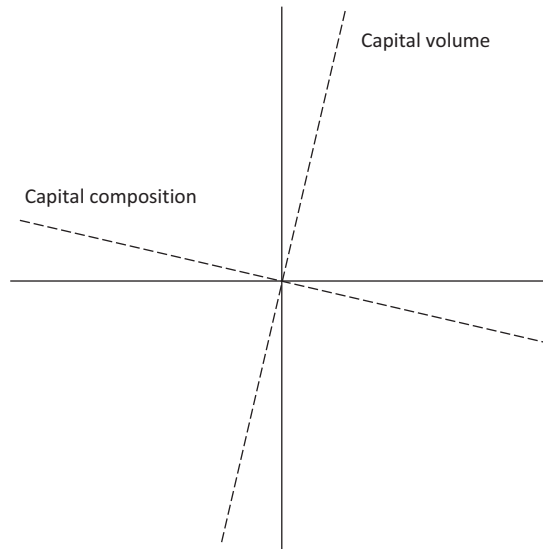


Figure 3.2 Average modelled vectors for capital volume and capital composition.

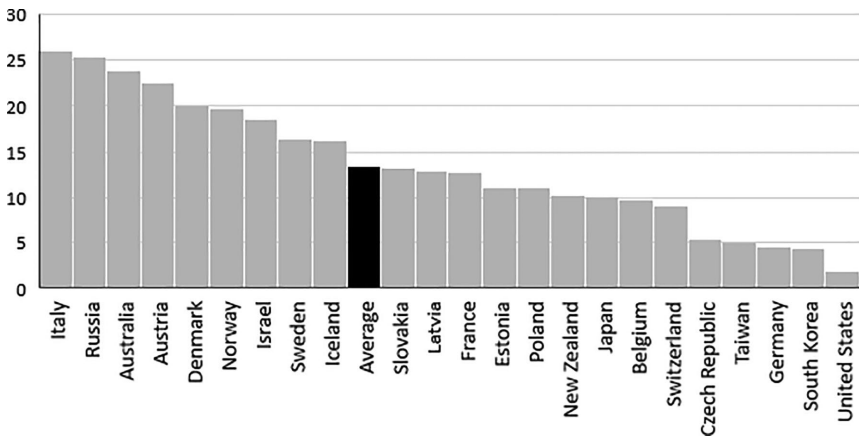


Figure 3.3 Degrees of rotation between CatPCA axes and modelled vectors for capital volume and composition.

### The shape of class

Now that we have explored the basic structural relationship between indicators of capital across social orders, and detected within it the universal existence of vectors for capital volume and capital composition, we need to examine the apparent ‘shape’ of the class structure by investigating the distribution of individuals in the resultant space. Is there an even spread,

as found in many Nordic studies, or are there regular sites of concentration and dispersion indicating areas of greater and lesser differentiation? Are there, moreover, any skews in the distribution of individuals following, for example, the hypothesised vectors for capital volume or composition? Initial inspection of the spaces of individuals reveals that many, like Australia, appear to be characterised by fairly even dispersion while others, like Austria, clearly display zones of greater and lesser homogeneity – specifically, in this case, a homogenisation of those with low cultural capital in terms of their economic capital (Figure 3.4). A more systematic yet straightforward method to assess the general tendency, however, is to cut each axis into three categories – low, middle and high – based on frequency terciles and determine their respective means (i.e. the coordinates for their central tendency) and standard deviations in both dimensions (Tables 3.4 and 3.5). The segments will have slightly different meanings depending on the degree of divergence between statistical axes and conceptual axes, which must be taken into account in interpreting the results, but this will nevertheless unveil any regularities of slope and span across the models.

Focussing on the aggregate level patterns, and beginning with the segments on Axis 1 – i.e. those high, middling and low in terms of cultural capital and income – the first finding to note is the lack of any obvious skew of their respective mean positioning on Axis 2 of the kind that might indicate a relationship with the posited vector for capital volume (Figure 3.5). The average central point of each sector sits astride the line of Axis 1. Next, the standard deviations for the three categories along Axis 1 indicate greater vertical dispersion at the bottom and the top than in the middle, with the upper region being most dispersed of all. In other words, the middle tercile is typically relatively homogenous in terms of its holdings of cultural capital and income, whereas the bottom and the top are a little more heterogenous. This

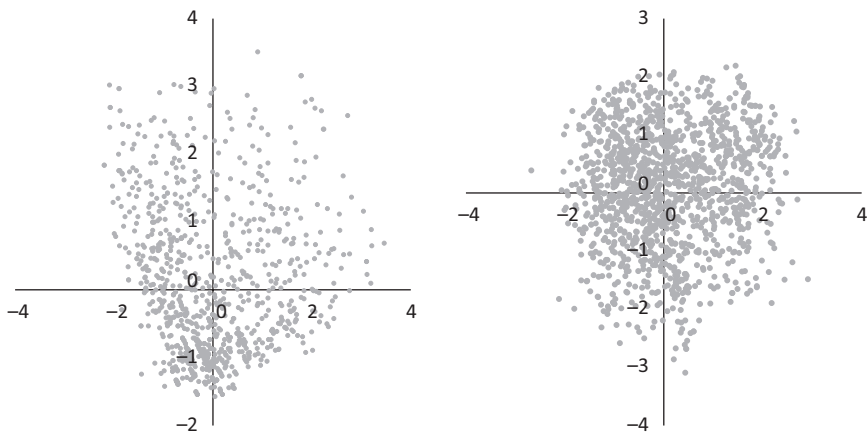


Figure 3.4 Two spaces of individuals: Austria (left) and Australia (right).

Table 3.4 Tercile means on axes 1 and 2

Country	Axis 1 terciles on axis 1			Axis 1 terciles on axis 2			Axis 2 terciles on axis 1			Axis 2 terciles on axis 2		
	Low	Mid	High	Low	Mid	High	Low	Mid	High	Low	Mid	High
Australia	-1.28	0.06	1.09	0.00	-0.18	0.08	0.03	-0.98	-0.07	-1.13	-0.15	1.18
Austria	-1.06	-0.23	1.27	-0.08	0.10	-0.06	0.32	-0.54	0.20	-1.06	-0.17	1.20
Belgium	-1.33	-0.01	1.13	-0.03	0.18	-0.10	0.04	-0.05	-0.20	-1.18	0.14	1.09
Czech Republic	-1.11	-0.11	1.19	-0.10	0.14	-0.04	0.05	-0.18	0.10	-1.13	0.00	1.13
Denmark	-1.21	-0.02	1.12	-0.29	0.13	-0.08	0.05	-0.11	-0.04	-1.10	-0.08	1.20
Estonia	-1.12	-0.15	1.22	0.00	0.00	0.01	0.04	-0.17	0.05	-1.15	0.01	1.15
France	-1.13	-0.14	1.18	0.14	-0.12	-0.01	0.18	-0.29	0.02	-1.09	-0.06	1.17
Germany	-1.10	-0.15	1.23	0.11	-0.11	-0.01	0.15	-0.31	0.14	-1.12	-0.04	1.16
Iceland	-1.19	-0.03	1.17	0.12	-0.04	-0.05	0.07	-0.12	-0.01	-1.11	-0.05	1.19
Israel	-1.18	-0.05	1.29	0.00	0.06	-0.02	0.21	-0.28	0.08	-1.11	-0.12	1.22
Italy	-1.22	-0.16	1.20	-0.12	0.22	-0.15	-0.09	-0.12	0.05	-1.23	0.70	1.12
Japan	-1.22	-0.03	1.20	0.05	-0.02	-0.02	0.08	-0.10	-0.03	-1.19	0.01	1.20
Latvia	-1.14	-0.09	1.21	0.02	0.04	-0.03	0.06	-0.09	0.01	-1.19	0.07	1.15
New Zealand	-1.17	-0.01	1.11	0.09	-0.07	0.01	0.15	-0.23	0.05	-1.11	-0.12	1.18
Norway	-1.15	0.00	1.11	0.00	0.01	-0.02	0.03	-0.16	0.08	-1.17	0.09	1.08
Poland	-0.97	-0.26	0.82	-0.07	0.11	-0.09	0.32	-0.53	0.25	-1.07	-0.07	1.09
Russia	-1.02	-0.22	1.29	-0.12	0.09	0.03	0.24	-0.23	0.03	-1.07	-0.08	1.14
Slovakia	-1.26	0.10	1.10	-0.01	0.02	0.01	-0.02	0.10	-0.15	-1.21	0.20	1.02
South Korea	-1.13	0.01	1.11	0.01	-0.07	0.04	0.11	-0.21	0.08	-1.11	-0.01	1.01
Sweden	-1.22	-0.05	1.15	0.17	-0.16	0.04	0.03	-0.09	-0.06	-1.13	0.00	1.18
Switzerland	-1.12	-0.07	1.19	0.08	-0.07	0.00	0.29	-0.46	0.17	-1.09	-0.07	1.20
Taiwan	-1.10	-0.09	1.17	0.07	-0.11	0.02	0.15	-0.30	0.13	-1.11	-0.01	1.11
US	-1.10	-0.10	1.19	0.08	-0.13	0.07	-0.06	0.16	-0.08	-1.15	-0.01	-1.12
Average	-1.15	-0.08	1.16	0.01	0.00	-0.02	0.11	-0.23	0.03	-1.03	0.01	1.05

Note: Highlighted cells indicate instance where differences between axis terciles on the orthogonal axis are significant ( $p < 0.05$ ).

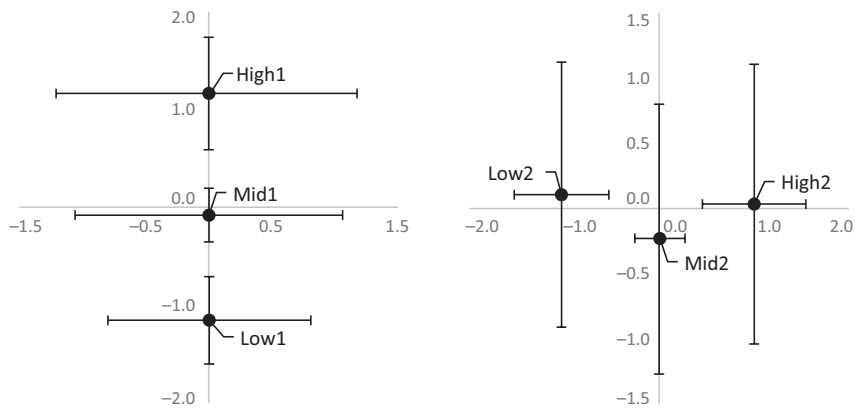
Table 3.5 Tercile standard deviations on axes 1 and 2

Country	Axis 1 terciles on axis 1			Axis 1 terciles on axis 2			Axis 2 terciles on axis 1			Axis 2 terciles on axis 2		
	Low	Mid	High	Low	Mid	High	Low	Mid	High	Low	Mid	High
Australia	0.55	0.28	0.39	0.96	1.10	1.05	0.94	1.06	1.16	0.38	0.26	0.59
Austria	0.21	0.29	0.73	0.56	1.09	1.32	1.07	0.89	1.05	0.38	0.25	0.69
Belgium	0.52	0.27	0.45	0.93	1.04	1.11	1.13	1.01	1.06	0.59	0.26	0.46
Czech Republic	0.40	0.27	0.56	0.71	1.05	1.24	1.12	1.11	0.82	0.58	0.26	0.46
Denmark	0.62	0.24	0.51	0.87	1.07	1.10	1.03	1.06	1.10	0.36	0.29	0.52
Estonia	0.34	0.29	0.66	0.75	1.13	1.20	1.03	1.07	1.09	0.53	0.28	0.52
France	0.43	0.26	0.65	0.77	0.94	1.31	0.87	0.97	1.24	0.45	0.26	0.62
Germany	0.28	0.29	0.62	0.67	1.02	1.33	0.94	0.99	1.13	0.52	0.24	0.60
Iceland	0.51	0.29	0.51	0.93	1.07	1.09	0.98	1.03	1.16	0.39	0.27	0.56
Israel	0.46	0.29	0.58	0.79	1.08	1.26	1.09	1.06	1.06	0.41	0.27	0.61
Italy	0.47	0.30	0.62	0.92	0.97	1.21	1.23	1.10	0.96	0.57	0.32	0.40
Japan	0.52	0.29	0.58	0.97	1.18	1.04	1.00	1.06	1.22	0.48	0.30	0.46
Latvia	0.44	0.28	0.57	0.93	1.10	1.11	1.05	1.02	1.10	0.53	0.29	0.43
New Zealand	0.55	0.27	0.49	0.82	1.01	1.21	0.83	1.04	1.16	0.42	0.30	0.59
Norway	0.58	0.29	0.49	0.87	1.09	1.11	1.03	1.13	0.94	0.61	0.26	0.40
Poland	0.19	0.25	0.82	0.39	0.96	1.49	1.11	0.80	1.04	0.57	0.19	0.78
Russia	0.26	0.27	0.82	0.71	1.17	1.17	1.18	1.06	0.96	0.38	0.21	0.79
Slovakia	0.72	0.26	0.46	1.11	1.13	0.89	1.11	1.15	1.01	0.75	0.24	0.30
South Korea	0.53	0.26	0.49	0.76	1.07	1.17	0.91	1.13	0.96	0.52	0.23	0.56
Sweden	0.50	0.29	0.49	0.89	1.07	1.10	0.82	1.09	1.24	0.42	0.30	0.48
Switzerland	0.42	0.27	0.57	0.66	0.91	1.42	0.89	0.87	1.17	0.52	0.23	0.59
Taiwan	0.39	0.27	0.58	0.70	1.04	1.26	0.86	1.04	1.10	0.54	0.24	0.60
US	0.36	0.26	0.58	0.80	1.07	1.18	1.11	1.05	0.89	0.53	0.33	0.51
Average	0.45	0.27	0.58	0.80	1.06	1.19	1.01	1.03	1.07	0.50	0.26	0.54



would seem to suggest the scatter of individuals along the axis approximates a bell curve and that, therefore, if diagrammed purely in terms of *frequency* distribution it would fall into some sort of diamond formation. As popular as that polygonal image might generally be for rendering contemporary class structures, however, it is misleading: the class structure is multidimensional, and the distribution of individuals determined by more than one principle, as the third discovery makes clear: there is a pronounced tendency for the regions on Axis 1 to become progressively more dispersed along Axis 2, i.e. in terms of their wealth (and inherited cultural capital), as they rise up the model. The bottom segment, poorest in cultural capital and income, is thus the least dispersed laterally, and its constituents thus tend to hold similar stocks of wealth, whereas those at the top are clearly most scattered according to wealth and, secondarily, inherited cultural capital, with the middle category, on average, in between. This is reminiscent of the inverted triangle distribution of individuals in the UK space along the capital volume axis.

Turning to the three sectors of the wealth axis, it can be seen that, unlike the groups on Axis 1, there is some separation from the axis line. There is, to be more precise, a slight tendency for those higher and lower in wealth to be above the axis line and a moderately more pronounced downwards drag of the middle wealth group. In other words, there is a correspondence – modest as it may be – between lower stocks of cultural capital and income, on the one hand, and middling stocks of wealth, on the other hand. When it comes to dispersion along the axes, the same pattern revealed along Axis 1 reappears: the middle sector is much more compressed on Axis 2 than the bottom and top sectors, indicating homogeneity, though the difference between the top and bottom is trifling. However, there is a clear divergence



**Figure 3.5** Average means and standard deviations of axis terciles on axes 1 and 2.

*Note:* The figure on the left displays data for terciles on Axis 1, and the figure on the right displays data for terciles on Axis 2.

in the distribution of individuals across the perpendicular axis. Unlike the terciles of Axis 1, the internal dispersion of those high, middling and low in wealth and inherited cultural capital along the axis of cultural capital and income emerges as both wide and fairly equal from group to group, though the mean positioning of the middle group means more of its constituent members sink towards the bottom of the space and fewer are at the top. This finding perhaps needs to be taken in conjunction with the aggregate trend on Axis 1, though. A more accurate rendering of spread within the space would have the lower whiskers of the high- and low-wealth categories 'pulled in' towards the low cultural capital sector on Axis 1 and the respective upper whiskers turned outward from the axis, indicating the inverse slopes of an upturned triangle.<sup>5</sup>

It should be reiterated that if individuals are, on aggregate, distributed along a roughly triangular formation it is not, strictly speaking, in relation to capital volume and composition, since the posited vectors for these principles if division usually run at distinct tangents to the statistically derived axes, but *vis-à-vis* cultural capital/income and wealth. When thinking about the patterning of individuals relative to the theoretically posited (and so far confirmed) axes, then, some very specific conclusions emerge. One of these is the relatively large and dispersed zone of individuals higher in cultural capital and lower in wealth and, in contrast, the smaller spread of those with the opposite holdings. Everything would seem to indicate that those who are poor in both cultural and economic terms are relatively sparse compared to those with little cultural capital but a modicum of wealth in the form of savings and home ownership. This could well be an effect of the variables and their categories, but it could also be that it indicates something of the changing shapes of social spaces across deindustrialising capitalist nations with expansive education systems. On the one hand, and continuing trends first spotted in *Distinction* but also resonating with later work by others (e.g. Bukodi and Goldthorpe, 2018), it could well signal the growing number of those who are relatively highly educated, and who have grown up with parents in an expanding professional-managerial bloc, but who have not (yet) managed to accumulate substantial savings or a home of their own. On the other hand, the enlarged education system might well have diminished the numbers of those with little economic *and* cultural capital, and instead those with little in the way of cultural capital (but also lower incomes) are likely to have accumulated a modicum of savings and home property because they are disproportionately of an older generation. These axes, as defined by these variables, may well, therefore, be tied up with trajectory effects, with the patterning of cultural capital and economic capital, both acquired and inherited, being intimately and inescapably bound to generational shifts, and the associated opposition of the old and the new, and reflect successive states of the system of reproduction in a single structure – a possibility that will be explored further in a later chapter.

There are, of course, variations on and deviations from the aggregate patterns across the national samples. Some spaces of individuals, for example, are more dispersed along the cultural capital/income axis than others, with the models for Israel, Flanders, Italy and Japan being the most stretched while those for Poland and South Korea are the most compressed. Similarly, some spaces are dispersed along the wealth axis to a greater degree than others, with Japan and Italy once again evincing considerable spread and Poland and South Korea being most compact. There are also differences in the degree of 'dip' displayed by the middle zone on the second axis, in the degree and nature of the divergence between the top and bottom categories of Axis 1 on the wealth axis, and in whether or not the deviations between segment means on the cross-cutting axis are statistically significant or not. The standard deviations also reveal sectors to be more or less spread vertically and horizontally across different models, making it possible to see which are more like Australia (e.g. Iceland and Sweden) and which are more like Austria (e.g. Poland and Switzerland) in the general shape of the space of individuals as well as which display their own distinctive patterns (e.g. the diamond model of Japan).

Not too much should be read into the specific discrepancies between national samples, however, since the precise distribution of individuals is linked to the constitution of the component variables, that is to say, their numbers of categories and the distribution of respondents across them. This is, arguably, less problematic for Axis 1, where the major relevant measures are mostly uniform in their internal composition and the distribution of respondents across them sociologically telling, but more troubling for Axis 2, where the number and spread of individuals across salient categories are more variable even if efforts were undertaken to achieve a degree of cross-model parity. Ultimately, the sample variations may be useful to bear in mind as context for analyses that follow, but they should not be taken to mean anything substantial about how the shape of the class structure actually varies from one nation to another. That would be to move too hastily from the model of reality to reality itself. The core finding has to be, instead, the *general* tendency, for all the minor differences between samples, for the space of individuals to bear a skew towards the high cultural capital/low economic capital pole.

### **Principles of variance in axis strength**

If sample specificities regarding the spread and pattern of individuals within the derived spaces cannot be readily taken as indicators of national divergences, might the same be said for discrepancies in the relative strength of the two major axes of difference? There are, after all, substantial differences in the amount of inertia explained by the primary and secondary dimensions across the models. The first axis is particularly forceful, for example, in Poland, Flanders, Slovakia and Taiwan but more modest in Iceland, Norway, Switzerland and Denmark, while the second axis is relatively pronounced in Norway and Israel but weaker in Poland, Taiwan and the Czech Republic.

The difference in strength between the two dimensions is widest in Taiwan and Flanders, but there is greater parity in the models for Iceland, Norway and Denmark. Could this be due to the number of categories in the variables and any imbalance between the cultural and economic indicators? An initial examination of the relationship between axis strength and the space of individuals reveals no obvious connection between the two – strong primary axes can characterise spaces that are compressed or stretched (e.g. Flanders and Poland), while spaces that were markedly different in their dispersion of individuals can have similar axis profiles (like Austria and Australia). It also seems telling that weaker primary axes, and greater axis balance, characterise the egalitarian and more highly educated Nordic societies, raising the question of whether differences may follow cross-national tendencies in the accessibility and distribution of specific manifestations of capital.

A simple way to test whether axis strength is related to political economy is to examine the bivariate correlations between explained inertia on each axis and a range of indicators bearing on the institutionalised distribution of capital within nations. In the case of economic capital we can use the Gini coefficients for both income and wealth at the time of the ISSP survey. In the case of cultural/social capital we can examine the relationship with the average age of leaving education, the proportion of individuals who had a parent in a professional/managerial role when they were growing up and, to balance that, the proportion having parents in routine manual work. These factors are, however, indissociable from broader structural tendencies, specifically the industrial and occupational constitution of social orders in the present and recent past. The more highly educated the sample, and the more the respondents and their parents are/were in professional-managerial, or at least non-manual, jobs, the more likely it is, one might assume, that they derive from a social order (long) oriented towards knowledge production, service provision and/or specialist technical skill rather than heavy industry and mass production. To add further context and confirmation, therefore, we can add other related indicators bearing on these which might be taken to measure the degree of de-industrialisation of a social order: the proportion of the workforce in the service sector, the proportion of respondents in professional or managerial positions, the proportion of respondents working in the public sector and the proportion of GDP expenditure on education.

The relationship with the share of women in employment is also explored on the grounds that greater workforce participation among women may generate a greater uptake of higher education, and, given its prominence in some models, the correlations with the proportion of respondents with a mother who did not work when they were young are also investigated. Both relate, ultimately, to the present and past state of the gender regime of nations, that is to say, the degree to which women's employment is encouraged or discouraged by national doxa regarding men's and women's roles and specific policy programmes (parental leave, childcare subsidies, family wage policies, etc.). Sample size calculations indicate that only correlations above 0.56, assuming

a p value of 0.05 (two-tailed), should be taken seriously, and even then the small number of cases demands caution in interpreting the results, but they may nevertheless signal something systematic. Moreover, given the specificity of the axes in the Czech, German, South Korean and US models correlations have been run both including them and excluding them (in which case correlations need to exceed 0.598) to see if they make any difference.<sup>6</sup>

The statistical relationships between the axes and a discrete series of interconnected indicators suggest that differences in the degree to which cultural capital (and income) differentiate people compared to wealth may indeed be related to specific features of industrial composition (Table 3.6). It transpires that the strength of Axis 1 is negatively correlated with education and specific features of occupational/industrial structure. Some of these – like the proportion of respondents in professional-managerial positions or the proportion of the workforce employed in services – are below the threshold of interpretability, but it can be more confidently inferred that the higher the average years of education, the higher the rate of female employment and the lower the number of people with parents in routine jobs, the weaker the differentiating power of inherited and acquired cultural capital. The tendencies are marginally more pronounced when the divergent models are excluded. Axis 2, meanwhile, displays reverse tendencies, though the relationship with years of schooling and the rate of female employment are not quite strong enough to be taken too seriously. It can be more securely argued that the higher the proportion working in the service sector and the lower the proportion with parents who were in routine work, the greater the differentiating power of wealth (and inherited cultural capital). The patterns are similar whether the American, German, Korean and Czech models are included or not, though most of the key relationships become a touch stronger, and the relationship between social origins and Axis 2 a little weaker, if they are excluded.<sup>7</sup>

Whatever the limitations of this analysis, and there are many, it is enough to firm up the hardly outlandish notion that the differentiating power of education and social origins may well lessen when more people – including women entering the workforce – are highly educated and have parents in non-manual (if not necessarily professional) roles. This might even play out in the everyday sense of difference, as people with university degrees or white-collar parents are simply more common. At the same time, however, it could be that with more refined indicators of cultural capital the inertia of Axis 1 would increase in those cases where it is currently weaker. In some social orders, having a degree or a white-collar parent might be crucial for differentiating conditions of existence and the feel for the game, but where they are more ubiquitous it may well be that holding a degree from a specific institution or in a specific subject, or having a parent in a specific (higher) profession, become more important both structurally and perceptually. Such is the relational nature of the social world.

Table 3.6 Axis correlations

	All models		Adjusted	
	Axis 1	Axis 2	Axis 1	Axis 2
Average years of education <sup>a</sup>	-0.659**	0.478*	-0.709**	0.531*
Prop. of GDP on education <sup>b</sup>	-0.392	0.504*	-0.380	0.438
Proportion in professional/ managerial jobs <sup>a</sup>	-0.497*	0.400	-0.543*	0.326
Proportion with parents in professional/managerial jobs <sup>a</sup>	-0.343	.0480*	-0.360	0.392
Proportion with parents in routine work <sup>a</sup>	0.610**	-.0611**	0.636**	-0.591**
Proportion with a mother who did not work <sup>a</sup>	0.281	0.194	0.264	0.252
Rate of female employment <sup>a</sup>	-0.632**	0.422*	-0.657**	0.348
Proportion in service sector employment <sup>c</sup>	-0.457*	0.746**	-0.540*	0.795**
Size of public sector <sup>a</sup>	-0.360	0.163	-0.344	0.049
Income Gini <sup>c</sup>	0.072	-0.052	0.074	-0.200
Wealth Gini <sup>c</sup>	-0.142	0.07	-0.156	-0.030
GDP rank <sup>c</sup>	-0.342	0.072	-0.325	0.042

Notes: Shaded cells indicate correlations meeting the sample size criterion.

Sources: <sup>a</sup> ISSP; <sup>b</sup> UNDP (<http://hdr.undp.org/en/content/expenditure-education-public-gdp>); <sup>c</sup> World Bank (2009 data).

\* Correlation is significant at  $p = 0.05$  (2-tailed).

\*\* Correlation is significant at  $p = 0.01$  (2-tailed).

A large service sector and lesser probability of having parents in routine manual work – and *ipso facto* a greater probability of having parents in non-manual work, indicative of post-industrialisation – go hand-in-hand with polarisation according to wealth and inherited cultural capital, that is to say, it augments the opposition between those who are educated and originate from higher echelons of the social space but have fewer economic resources and those with lower inherited cultural capital but substantial wealth. Perhaps the superabundance of individuals in the spaces rich in cultural capital but poor economically are disproportionately working in newer, lower-paid service-sector jobs – a possibility to be explored later.

If indeed it can be said, on the basis of what we have seen, that the constitution of the social space – i.e. what matters and how for defining difference – is linked in some way to the degree of deindustrialisation and governmental action to expand access to higher levels of education, and if deindustrialisation and educational expansion can be said to be – at least in part, as other factors will be involved – *strategies* pursued by state actors in the space of states, as means to improve economic standing and political voice on the world stage, then it becomes clear that the shape of the class structure, and all the everyday practices and perceptions it spawns, is irrevocably yoked to the position

occupied and trajectory travelled of its home nation state in the global order. Given that the correlations are often modest and contain specific deviant models, however, it is worth emphasising that no iron law or universal determinism is posited here, only *regularities* across diverse spaces of difference in which myriad factors interact and intervene. Each nation's social space, ultimately, is the product of struggles and strategies within its own relatively autonomous field of power, with its own unique history (or 'path'), even if general principles of variation between fields of power given by position in the global field also delimit the space of possibilities for action.

## Conclusion

There is, it would seem, a remarkable cross-national consistency to the structure of the relationship between fundamental components of capital in contemporary capitalist misrecognition orders. In all but a few cases, the first two dimensions of difference, using our chosen statistical procedure, were immediately discernible. The more substantial of these took the form of a high/low polarity based on cultural capital plus household income, demonstrating a close connection between inherited cultural capital and acquired cultural capital – social reproduction, in other words – as well as earning capacity. The other opposed those with low and high wealth holdings, which tended to have a negative, but not always strong, correlation with inherited cultural capital. Having a degree of personal wealth, therefore, is irreducible to cultural capital or income, effectively, in conjunction with the first axis, differentiating those with a high volume of capital *in toto* and those with low cultural capital, and even relatively low income, but ample savings and considerable home value.

In a few analyses the axes came out differently, distinguishing capital volume and capital composition in the manner posited at the outset. Yet even the remaining spaces *do not refute* the classical model of social space as defined by these two principles but, in their own way, *confirm* it instead. The spaces are structured in such a way that vectors for capital volume and capital composition unambiguously cut through them, with the 'tilt' between statistical model and conceptual model being a question of degree. The statistical procedure is not designed to bring out the social salience of sources of advantage and disadvantage or the fault lines of people's sense of difference, only the correlative relationships between variables, and so it is perhaps no surprise that it highlights the close connection between species of the same capital and their differentiation from species of other forms of capital. The fact that it does so means it approximates the heuristic model only in a specific way.

Inherited cultural capital and wealth play a significant role in differentiating people according to capital composition – more significant than either education or income, though they play their part too. It may well



be, as already stated, that aspects of acquired, institutionalised cultural capital (subject, institution, etc.) would come out prominently if there were measures of them available, but it might also just be that, with social change – educational expansion, industrial transformation, growing wealth disparities and generational gaps – inherited cultural capital and the capacity to save and own a home have assumed greater importance than in the past. Only future research with a fuller range of capital indicators at its disposal will be able to adjudicate that for sure.

We saw that the spaces tend, on aggregate, towards a broadly triangular configuration and made the case that, when considered relative to the vectors for capital volume and capital composition, this indicates a greater or lesser – depending on the tilt of the model and the dispersion of individuals – profusion of those with high stocks of cultural capital but lower stocks of economic capital and a relatively diminutive section of those equally poor in all forms of capital. This, we broached, may be linked to generational change. It also became clear that differences in axis strength may be rooted in the industrial-occupational constitution of nations, and possibly the gender regimes underlying female participation in the workforce, which are themselves indicative of a relationship between social spaces and positions in the space of states.

It might reasonably be claimed, in sum, that the first and most basic outcome of all that we have seen so far is solid confirmation that capital volume and capital composition appear to be universal principles of difference across capitalist nations old and new, with variations in axis strength indicating the relative importance of the elements of capital measured here. Along the way, however, myriad follow-on questions have inexorably presented themselves. Some of these relate to the yet-to-be analysed third dimension of difference in the models. What is its structure in each case, and is it the same across models or are there systematic variations? Does it relate to the third axis of the social space as posited by Bourdieu, i.e. trajectory? Others bear on the social characterisation of the two core axes of difference. What is the relationship between the spaces and gender, generation and occupation, and other factors for that matter? To what extent and in what ways do the spaces correspond with outlooks and practices indicating differences of ethos, or habitus, grounded in different conditions of existence, and with divergent perceptions and evaluations of one's place in the world? Do the correspondences fit with the detection of capital volume and composition in the spaces or follow alternative lines of division and opposition? Are they even arrayed multidimensionally at all, justifying the spatialisation of class, or are they, as those advocating one-dimensional visions of class and stratification might suppose, differentiated by capital volume (or cultural capital plus income) alone? The only way to answer these latter queries is to embark on a systematic examination of homologies, beginning first of all with the relationship between class and the occupational division of labour.



## Notes

- 1 Axis retention is based on several standard principles (see, e.g. Le Roux and Rouanet, 2004: 162; Linting and van der Kooij, 2012; DiFranco, 2016): (i) retention of all axes with an eigenvalue larger than 1 (the so-called 'Kaiser criterion'); (ii) retention of axes together accounting for a substantial proportion of the total inertia, here set at 70 percent; (iii) retention of axes explaining a substantial quantum of inertia for each variable (in this case a minimum absolute contribution to the sum of retained eigenvalues of 0.4, though it was usually much higher); and finally, (iv) sociological interpretability. To aid selection the models were bootstrapped, generating 95 percent confidence intervals for each pertinent figure (Linting et al., 2007b). This allowed in some cases for retention of axes where critical values fell below the stated thresholds (e.g. eigenvalue <1, inertia <70 percent) but included the latter in their confidence intervals. The process is complicated by the peculiarity of the CatPCA procedure: one has to specify how many axes are to be retained before the analysis, and the results for a two-dimensional model will not, for example, be the same as those for a three-dimensional model. This means one has to experiment with different numbers of axes to determine the optimal results. In our case, operating with relatively few variables, the starting point was a two-dimensional solution, which was then extended to a three-dimensional solution, while further analyses of four-dimensional solutions revealed little extra insight but less adequate results (e.g. reduction of axes to single variables).
- 2 The Polish model is complicated by the existence of a third dimension polarising those with high savings but low property value and those with low savings but high property value.
- 3 Here the MCA models diverged slightly from the CatPCA models insofar as the former often contained certain modalities of inherited cultural capital – especially a mother in professional/managerial position or having a large number of books in the family home – and, more rarely, acquired cultural capital contributing above average to the second axis. They were nearly always, however, so heavily outweighed by modalities of high and low savings and property value that interpreting the axis as anything other than primarily a wealth one was a stretch.
- 4 Rotating the axes using standard algorithms, experimented with despite the suspicion a GDA approach encourages, only exacerbates the issue by more firmly and universally distinguishing high/low cultural capital and high/low wealth on the two axes respectively.
- 5 This is, in all probability, what concentration ellipses would depict could they be calculated and diagrammed for the aggregate patterns.
- 6 That the Belgian sample represents Flanders alone should also be borne in mind when considering correlations of axis strength with variables not drawn from the ISSP sample.
- 7 Additional tests were undertaken to examine the possibility that axis strength is linked instead to operational procedure and, therefore, artefactual. Thus explored were correlations of inertia rates with: (i) the total number of categories in the model; (ii) the number of categories for the variables measuring cultural capital; (iii) the number of categories measuring economic capital; (iv) the discrepancy between categories for cultural capital and categories for economic capital; (v) and – to test whether axis strength is related to axis 'purity' – the proportion of inertia on each axis explained by variables of cultural or economic capital. No results were significant at the 5 percent level and coefficients were low (<+/-0.4).