Where Do Cultural Omnivores Come From? The Implications of Educational Mobility For Cultural Consumption*

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Abstract

Many scholars see social mobility as playing a key role in explaining the emergence of cultural omnivores. In this paper, we discuss three versions of the social mobility argument and assess their empirical validity using recent survey data on visual arts consumption in the UK. By applying diagonal reference models to our data, we show that none of the three versions of the social mobility argument receives empirical support. We find that both parents' and respondent's educational level affect visual arts consumption, with the weight of the former being about a third in magnitude as the latter. There is no difference in the relative weights of origin and destination between the upwardly mobile and the downwardly mobile. Finally, socially mobile individuals are actually *less* omnivorous than those who are intergenerationally stable in advantaged positions. In light of these findings, we argue that social mobility does not explain the emergence of visual arts omnivores in the UK.

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1 Background and research question

Recent research on the social stratification of cultural consumption has consistently shown that although individuals in advantaged social positions are more likely than others to consume high-brow culture, they do not have any general aversion against other cultural forms. Indeed, consumers of high-brow culture are just as likely to consume middle-brow or popular culture, leading Peterson and Simkus (1992) to describe them as cultural omnivores (see also Peterson and Kern, 1996; Van Eijck, 2001; López-Sintas and García-Álvarez, 2002; Bunting *et al.*, 2008; Bennett *et al.*, 2009; Chan, 2010).[1]

But where do cultural omnivores come from? Broadly speaking, there are two complementary views, which we label as the cultural democratisation argument and the social mobility argument respectively. The first view says that the emergence of cultural omnivores reflects a general democratisation of culture which, in turn, can be traced to a range of long-term social structural, cultural and institutional changes. On social structural change, Peterson and Kern (1996, p. 905) argue that with growing affluence, rising educational level, broader curriculum, and the gradual fusion of the arts and the media, high-brow culture has become more accessible and, correspondingly, less of a status marker. Similarly, Van Eijck (1999, p. 310) notes that advertisers use arts to market commerical products, and art institutions employ marketing techniques in order to reach larger audiences. Thus, 'mass culture, commerce, and the arts have become more and more intertwined, resulting in a blurring of the boundaries between these domains.'

On cultural trends, Peterson and Kern (1996, p. 905) argue that in the aftermath of the Second World War, and as a direct consequence of the horror of Nazism, overt discrimination and prejudice based on race, religion, etc. have become untenable. This can be seen as part of a broader cultural trend towards greater tolerance of other cultures (Inglehart, 1990). Historians have also documented a long-term decline in deference (Runciman, 1997, pp. 153–158). Supercilious attitudes, or at least their public expression, have become less acceptable (Chan and Goldthorpe, 2004).

Furthermore, the art-world itself has changed. In the past, royal academies of arts defended the particular aesthetic standard that they endorsed. But the 'market forces that swept through all the arts brought in their wake new aestheic entrepreneurs who propounded ... new and ever more exotic modes of expression' (Peterson and Kern, 1996, p. 905). Whatever merits these

[1] It should be noted that often a majority, or at least a substantial minority, of individuals in advantaged social position do *not* consume high-brow culture at all (see e.g. Peterson, 1992; Chan and Goldthorpe, 2007). By implication, cultural omnivores tend to be a small minority of high status groups, let alone of the general population.

competing aesthetic claims might have individually, their joint impact is to undermine the idea that there is a single artistic standard. In this way, institutional changes in the art-world also promote a more inclusive, omnivorous attitude (see also Peterson, 1992).

The various strands of the cultural democratisation argument sketched above all suggest that cultural boundaries are weakening. In contrast, although the social mobility argument does not preclude the blurring of cultural categories, it does not require it either. Instead, it is premised on individuals crossing (possibly fixed) cultural boundaries. One version of the social mobility argument goes as follows. Socially mobile individuals were brought up in the cultural milieu of their family of origin. But, as adults, they move in quite different social and cultural circles. Because of their diverse cultural exposure, mobile individuals are more likely to be culturally omnivorous than those who are intergenerationally stable in their social positions. And since there has been substantial social mobility, in the absolute sense and mainly upward in direction, in all industrial societies over much of the twentieth century (Erikson and Goldthorpe, 1992), this could explain the emergence of cultural omnivores in many societies over the past few decades.

It should be clear that the cultural democratisation argument and the social mobility argument are not mutually exclusive. Both could be true. In this paper, we focus on the latter, partly because the social mobility argument is better-defined and thus more directly testable. More importantly, the social mobility argument is widely accepted by scholars in the field. But, as we will demonstrate below, this view is not supported by empirical evidence.

1.1 Three versions of the social mobility argument

Both Peterson and Kern (1996) and Van Eijck (1999) regard social mobility as an important contributing factor to the emergence of cultural omnivores. Similarly, Lahire (2008, p. 174) maintains that 'individual mobility ... often translate[s] into a heterogeneity of cultural practices and preferences.' And in a study of tastes in comedy, Friedman (2012, p. 467) 'find[s] omnivorousness only within one social group—the upwardly mobile.'

Although many scholars are in agreement that social mobility contributes to cultural omnivorousness (see also Ultee and de Graaf, 1991; Daenekindt and Roose, 2013a,b, 2014; Coulangeon, 2015), closer inspection reveals three different versions of the social mobility argument. The first refers to a composition effect. This suggests that social mobility changes the composition of high status groups, but *not* the consumption behaviour of high status individuals. As Van Eijck (1999, p. 311) suggests, 'the higher educated has become more heterogeneous because its members are recruited from increas-

ingly diverse social backgrounds ... high-status groups may be composed of increasingly *different* people rather than increasingly *omnivorous* people' (emphasis in the original). If this is true, the *nouveau riche* would still consume low-brow culture only, while the 'old money' would remain high-brow snobs. It is only when they are viewed as a group that high status people are culturally omnivorous. Van Eijck (1999) himself is not committed to this argument which, as he points out, is directly testable with individual-level data. In particular, this view implies that the social origin of individuals completely determines their cultural consumption pattern, with destination playing little or no role.

Alternatively, the experience of social mobility might actually change the taste and behaviour of individuals. In his study of comedy tastes, Friedman (2012, p. 467) posits that 'lowbrow comedy taste is established during childhood but highbrow tastes are added as cultural capital grows.' In other words, social mobility leads to cultural omnivorousness because mobile individuals are exposed to more diverse cultural milieus. This is perhaps what most scholars have in mind when they speak of social mobility effects on cultural consumption. Thus, Coulangeon (2015, p. 55) argues that 'socially mobile people face, at least potentially, a higher variety of cultural influences across their life course than non-mobile people, they are consequently expected to be more diverse in their cultural choices and practices.' This view implies that both origin and destination play a non-negligible role in shaping cultural consumption. But, crucially, because it is diverse exposure that leads to cultural omnivorousness, it also implies that upwardly mobile individuals are more omnivorous than those who are immobile in high status positions. For example, first-generation university graduates should be more omnivorous than second-generation graduates.

As regards the third version of the social mobility argument, consider this early statement of Duncan (1966, p. 91), 'one is not entitled to discuss "effects" of mobility ... until he has established that the apparent effect cannot be due merely to a simple combination of effects of the variables used to define mobility.' In Duncan's view, then, to speak of social mobility effects, we need to establish not only the main effects of origin and destination, but also their interaction effect (i.e. particular combinations of origin and destination) on the outcome of interest.[2] An example of such interaction effect, regarding the class–vote association in the UK, concerns a possible asymme-

[2]Although Duncan's argument is widely accepted, there is a technical debate on what is the best way to specify the interaction effect (see e.g. Hope, 1975, 1981; Sobel, 1981, 1985). It is now commonly accepted by statisticans and applied researchers alike that Sobel's diagonal reference models, which we use in this paper, provide a cogent and helpful way to model social mobility effects (see e.g. Cox, 1990; Clifford and Heath, 1993).

try between upward and downward mobility. Clifford and Heath (1993, p. 51) suggest that 'the downwardly mobile ... retain the values and behaviour patterns of their class of origin, whereas the upwardly mobile are assimilated ... into the social networks and culture of their class of destination.' In other words, social origin is more salient for the downwardly mobile than for the upwardly mobile. But the result is that mobile individuals, whether they move upwards or downwards, are likely to vote Conservative. This is analogous to the 'status maximisation' hypothesis of Daenekindt and Roose (2013a,b, 2014) in which socially mobile individuals behave as the immobiles in either their origin or destination category, *whichever is higher*. We refer to this as the asymmetry argument. In Section 3 below we will explain how we test these three versions of the social mobility argument.

2 Data and measures

The data we use come from a new household panel survey in the UK called Understanding Society. It was launched in 2009 and, at the time of writing, four waves of data are available for analysis.[3] Understanding Society is still a young panel survey. But it is well suited to addressing our research question, firstly, because it has a very large sample and, when appropriate sampling weights are applied, the data is representative of the UK population. More importantly, wave 2 of the survey contains a cultural consumption module. In this paper, we focus on visual arts consumption, mainly because the relevant questions are very similar to those used in some previous UK studies (e.g. Chan and Goldthorpe, 2007). Following past practice, we restrict our analysis to respondents aged 20 to 64 ($N = 28,657$).

Respondents were asked whether they had been to five types of visual arts events in the past 12 months. Table 1 lists the events and shows the percentages of respondents who replied 'yes'. The binary response to these indicators form a 5-way contingency table with 32 (i.e. 2^5) cells which we analyse with latent class models. The details of our latent class analyses can be found in Appendix A. Suffice it to say here that there are three latent classes in our preferred model. Members of the largest latent class (comprising 58% of the sample) are quite unlikely to attend visual art events,

[3] All individuals aged 16 or over in the sampled households are interviewed each year. Individuals leaving their household are followed, and all adult members of their new household are also interviewed. Data collection of each wave, using computer assisted personal interviewing, lasts 24 months, such that the second wave of data collection started in January 2010 and finished in January 2012. Respondents of the British Household Panel Survey (BHPS) are incorporated into the Understanding Society sample from wave 2. See `www.understandingsociety.ac.uk` for details.

Table 1: Percentage of Understanding Society respondents aged 20–64 who have been to visual arts events in the past 12 months ($N = 28,657$)

		%
1	Exhibition or collection of art, photography or sculpture or a craft exhibition (not craft market)	28.6
2	Event which included video or electronic art	7.5
3	Street arts or public art display or installation (art in everyday surroundings, or an art work such as sculpture that is outdoors or in a public place)	16.5
4	Carnival or culturally specific festival (for example, Mela, Baisakhi, Navrati, Feis)	14.2
5	A museum or gallery	41.4

while those of the smallest latent class (13%) are avid consumers of visual arts of all kinds. There is a third latent class that is in-between the other two classes both in terms of its size (29%) and the probability of visual arts consumption. Overall, the results of our latent class analysis are very similar to those reported by Chan and Goldthorpe (2007), and following them, we label the three latent classes (in descending order of size but ascending order of visual arts consumption) as inactives (I), paucivores (P) and omnivores (O) respectively (see also Alderson *et al.*, 2007). Latent class membership is the dependent variable in the analyses below.

Our main independent variables are the educational attainment of the respondents and that of their parents.[4] We define social mobility in terms of education rather than social class because education is one of the strongest determinants of cultural consumption. By contrast, social class does *not* consistently predict cultural consumption once education and social status, in the classical Weberian sense, are taken into account (see e.g. Chan and Goldthorpe, 2007; Chan, 2010). Focusing on education is also in line with past research (Van Eijck, 1999; Daenekindt and Roose, 2013a,b, 2014; Ultee and de Graaf, 1991). Finally, and more practically speaking, there is, as yet, no information on parental social class in the Understanding Society dataset.

In Understanding Society, six educational levels for the respondents, but only five levels for the parents, are identified. To achieve comparability, we collapse the two educational classification schemes to three broad levels, namely, 'no qualifications', 'intermediate qualifications', and 'Bachelor's Degree or above' (see Table 2 for details).[5]

[4]Parents' education is the higher of father's or mother's education level.

[5]GCSE is the basic school-leaving certificate, typically gained at age 16; A-level is the

Table 2: Educational categories for respondents and parents and the collapsed threefold classification

Parents	Collapsed	Respondent
1 Gained a univ/higher degree	1 Degree	1 Degree
2 Gained post school qual/cert	2 Intermediate	2 Other higher degree
		3 A-levels etc
3 Left school with some qual/cert		4 GCSE etc
4 Left school with no qual/cert	3 No qual	5 Other qual
5 Did not go to school at all		6 No qual

Table 3 reports the distribution of respondents by their own educational level and that of their parents. Between the two generations, the share of university graduates has doubled from 14% to 28%, while the proportion of people without qualifications dropped from 29% to 17%; and the share of people with intermediate qualifications has stayed roughly stable. Also, just over half (53%) of the respondents are educationally immobile (i.e. found in cells on the main diagonal), 35% are upwardly mobile (found in cells below the main diagonal), and 13% suffer downward mobility (above the main diagonal).[6]

Table 3: Distribution of respondents by parents' education and own education (cell percentages)

	respondent			
parents	degree	immediate	no qual	overall
degree	8.4	5.7	0.4	14.4
intermediate	15.8	33.9	6.5	56.3
no qual	3.8	15.0	10.5	29.3
overall	28.0	54.6	17.4	100.0

qualification for university matriculation, typically gained at age 18; other higher degree refers to post-school qualifications below the Bachelor's Degree level. We have repeated our analyses using a fourfold educational classification, by distinguishing categories 2 and 3 of the original parental classification scheme and by separating category 2 from categories 3 and 4 of the respondents' scheme. The results based on this fourfold scheme are very similar to those reported in this paper. Details are available from the authors on request.

[6]We have repeated our analyses for three age cohorts separately. The results of these cohort-specific analyses, corresponding to Tables 3 and 4 of the main text, are reported in Appendix B.

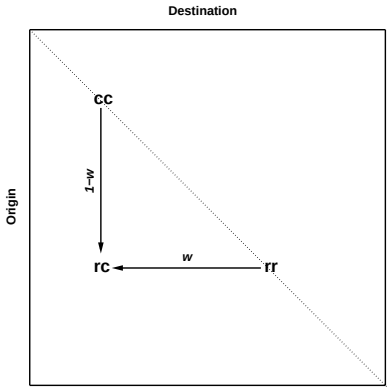

Figure 1: Intuition of the diagonal reference model

3 Diagonal reference model and hypotheses

Our main analytical tool is the diagonal reference model which was first proposed by Sobel (1981, 1985) in a study of social mobility effects on fertility. This class of models has subsequently been used to study a wide range of topics, including class-voting (Weakliem, 1992; Clifford and Heath, 1993), life satisfaction (Marshall and Firth, 1999), class identity (Sobel *et al.*, 2004), parenting practices (Van der Slik *et al.*, 2002), intergenerational proximity (Chan and Ermisch, 2015), and cultural consumption (Ultee and de Graaf, 1991; Daenekindt and Roose, 2013a,b, 2014; Coulangeon, 2015). In this paper, our dependent variable is the trichotomous latent class membership (I, P or O). The baseline diagonal reference model can be represented as follows:

$$\log\left(\frac{\pi^V_{rc}}{\pi^I_{rc}}\right) = w^V \log\left(\frac{\pi^V_{rr}}{\pi^I_{rr}}\right) + (1 - w^V) \log\left(\frac{\pi^V_{cc}}{\pi^I_{cc}}\right), \tag{1}$$

where V is either P (paucivores) or O (omnivores); I stands for the inactives; π^V_{rc} is the probability of individuals with parental educational level r and own educational level c being a V; w^V measures the relative importance of parents' education in determining visual arts consumption, with $0 \leq w^V \leq 1$; and $1 - w^V$ measures the relative weight of respondent's own education. In other words, under this model, the logit of someone from origin r and in destination c being a V rather than an I is constrained to be a weighted average of the corresponding logits of immobile people with educational levels r and c respectively.

The idea is that socially immobile individuals are the 'pure types'. They set the taste and consumption standards for their educational levels. Socially

mobile individuals, taking behavioural cues from the immobiles in the relevant origin and destination categories, combine these reference standards as a weighted average. Figure 1 illustrates this intuition diagrammatically.[7]

Recall that the first version of the social mobility argument (i.e. the composition effect argument) says that the cultural consumption behaviour of individuals is completely determined by their social origin. This implies that $w^V = 1$, and model 1 is reduced to the following.

$$\log\left(\frac{\pi^V_{rc}}{\pi^I_{rc}}\right) = \log\left(\frac{\pi^V_{rr}}{\pi^I_{rr}}\right). \tag{2}$$

As model 2 is nested within model 1, we could compare their fit to the data using the likelihood ratio test.

> Hypothesis 1: (if the composition effect argument holds) model 2 fits that data as well as does model 1.

If it turns out that w^V is significantly different from 1 (or, equivalently, that the fit of model 2 to the data is significantly worse than that of model 1), then both origin and destination influence individual behaviour. But this is *not* necessarily empirical support for the second version of the social mobility argument (i.e. the diverse exposure argument). In fact, if model 1 fits the data, then the diverse exposure argument cannot be valid. To see this, recall that this argument requires socially mobile individuals to be more omnivorous than those who are intergenerationally stable in advantaged positions. Now, the diagonal reference model constrains the logit of mobile individuals (say, being O rather than I) to be a weighted average of the logits of the two reference immobile groups. Because $0 \leq w^V \leq 1$, the logit of the socially mobile cannot be greater than the larger of the two reference logits; nor can it be less than the smaller of the two.[8] And since probability is a monotonically increasing function of the logit, one implication of model 1 is that socially mobile individuals cannot be more omnivorous than immobile individuals in the higher reference education category.[9] Conversely, if the diverse exposure argument is true, then model 1 would fail to fit the data.

> Hypothesis 2: (if the diverse exposure argument holds) model 1 does not fit the data.

[7] We use the R 'gnm' package to fit diagonal reference models (Turner and Firth, 2011).

[8] That is, let γ_{rc} be the logit of the rc-th cell, model 1 requires that $\min(\gamma_{rr}, \gamma_{cc}) \leq \gamma_{rc} \leq \max(\gamma_{rr}, \gamma_{cc})$.

[9] Past research has consistently shown that better educated people are more omnivorous. See also Table 5 below.

The third version of social mobility argument requires the relative weights of origin and destination to differ between upwardly mobile and downwardly mobile individuals. This asymmetry can be parameterised as follows:

$$\log\left(\frac{\pi^V_{rc}}{\pi^I_{rc}}\right) = (w^V + \delta^V)\,\log\left(\frac{\pi^V_{rr}}{\pi^I_{rr}}\right) + \left(1 - (w^V + \delta^V)\right)\,\log\left(\frac{\pi^V_{cc}}{\pi^I_{cc}}\right), \qquad (3)$$

where $\delta^V = 0$ if $c \geq r$ (i.e. if respondent is *not* better qualified than parents). In other words, model 3 returns two sets of weight parameters: $w^{V'} = w^V + \delta^V$ for upwardly mobile individuals, and w^V for downwardly mobile individuals.

> Hypothesis 3: (if the asymmetry argument holds) model 3 fits the data better than does model 1.

Models 1, 2 and 3 are models for aggregate data. Comparing them will help us identify, in broad terms, an appropriate model for our data. But we will also analyse the data at the individual-level. This is important because previous research has identified several determinants of visual arts consumption other than education, including social status, age, gender, parental status, ethnicity, and location (see e.g. Chan and Goldthorpe, 2007). We need to check whether the results of our aggregate analyses remain robust after we take these covariates into account. For example, visual arts consumption has been found to be higher in London than in most regions of the country, possibly reflecting the concentration of galleries, museums and other visual arts venues in London. At the same time, a disproportionate share of graduate jobs in the UK is London-based. So a critic might argue that the large education effects revealed in the aggregate analysis might, to some degree, reflect the greater opportunities for visual arts consumption in London compared to the rest of the UK. To address this and similar concerns, we incorporate location and other determinants of visual arts consumption in our diagonal reference models as follows.

$$\log\left(\frac{\pi^V_{rc}}{\pi^I_{rc}}\right) = w^V\,\log\left(\frac{\pi^V_{rr}}{\pi^I_{rr}}\right) + (1 - w^V)\,\log\left(\frac{\pi^V_{rr}}{\pi^I_{rr}}\right) + \boldsymbol{x'\beta^V}, \qquad (4)$$

$$\log\left(\frac{\pi^V_{rc}}{\pi^I_{rc}}\right) = \log\left(\frac{\pi^V_{rr}}{\pi^I_{rr}}\right) + \boldsymbol{x'\beta^V}, \qquad (5)$$

$$\log\left(\frac{\pi^V_{rc}}{\pi^I_{rc}}\right) = (w^V + \delta^V)\,\log\left(\frac{\pi^V_{rr}}{\pi^I_{rr}}\right) + \left(1 - (w^V + \delta^V)\right)\,\log\left(\frac{\pi^V_{cc}}{\pi^I_{cc}}\right) + \boldsymbol{x'\beta^V}, \qquad (6)$$

where $\boldsymbol{x}$ is a vector of covariates and $\boldsymbol{\beta^V}$ is the corresponding vector of parameters. Models 4, 5, 6 correspond to models 1, 2 and 3 respectively. Descriptive statistics of the covariates are reported in Table 10 in Appendix C.

Table 4: Goodness of fit statistics of diagonal reference models

model	G^2	df	p	model comparison	ΔG^2	Δdf	p
1	8.296	10	0.59				
2	2401.261	12	0.00	2–1	2392.964	2	0.00
3	5.416	8	0.71	1–3	2.880	2	0.23

Note: G^2 is the deviance of the model, df refers to its degree of freedom, and p is the probability of Type I error.

4 Results

Table 4 reports the goodness of fit statistics of the diagonal reference models. Briefly, on the left-hand panel, G^2 is the likelihood-ratio χ^2 statistic or the model's deviance. It describes how well or poorly the model fits the observed data, with smaller G^2 indicating a better fit. Residual degrees of freedom are denoted by df; more parsimonious models have higher df. Finally, p is the probability of Type I error. That is to say, assuming that the model in question is the true model, p tells us how likely it is to draw a sample that gives us a deviance that is at least as large as the one obtained. The right-hand panel reports the likelihood ratio tests for nested models. Here, p tells us how likely it is that the reduction in deviance (ΔG^2) of the more complex model is due to chance, given its extra parameters (and the corresponding loss of degrees of freedom, Δdf).

The first thing to note about Table 4 is that, contrary to Hypothesis 2, our baseline model 1 actually fits the data very well. This is inconsistent with the diverse exposure argument. That is to say, so far as visual arts consumption in the UK is concerned, first-generation university graduates are *not* more omnivorous than second-generation graduates.

This is shown graphically in Figure 2 where we plot the predicted probability, under model 1, of being a visual arts omnivore for various combinations of respondent's education and parent's education. The tallest column in Figure 2 refers to second-generation graduates (i.e. both the respondent and the parent are university graduates), 34% of whom are visual arts omnivores. The corresponding probabilities of first-generation graduates are 25% (if their parents have intermediate qualifications) and 19% (if their parents have no qualifications).[10]

[10]There is a very similar gradient in the observed data. For respondents who are university graduates, their probability of being a visual arts omnivore, in descending order of

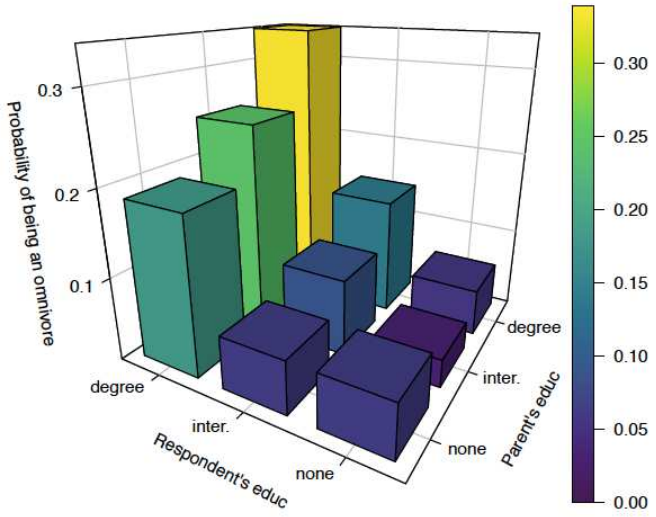

Figure 2: Predicted probability of being a visual art omnivore by respondent's and parent's education

Under model 1, $w^P = .238$ ($s.e. = .021$) and $w^O = .275$ ($s.e. = .015$). These estimates strongly suggest that both w^P and w^O are significantly different from one.[11] Furthermore, it can be seen from Table 4 that the fit of model 2 (which implies that $w^V = 1$) to the data is very much worse than that of model 1. Indeed, model 2 does not fit the data at all. Thus, we also reject Hypothesis 1 and the composition effect argument.

Model 3 includes the asymmetry parameter and thus allows the relative weights of origin and destination to differ between upwardly mobile and downwardly mobile individuals. Model 3 also fits the data well. And since models 1 and 3 are nested, their fit to the data can be compared formally using the likelihood ratio test. Table 4 shows that, compared to model 1, the deviance of model 3 is reduced by 2.88 for 2 degrees of freedom, which is not a statistically significant improvement in model fit ($p = .23$). Thus, there is also no evidence to support Hypothesis 3 or the asymmetry argument.[12]

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parental education, are .33, .25 and .19 respectively. The close resemblance between the observed and predicted probabilities is not surprising as model 1 fits the data very well.

[11]The 95% confidence interval of w^P is (.196, .280) and that of w^O is (.245, .305).

[12]Under model 3, the weight parameters for upwardly mobile people are $w^{P'} = .216$ ($s.e. = .030$), $w^{O'} = .253$, ($s.e. = .020$); for downwardly mobile individuals, $w^P = .269$ ($s.e. = .042$) and $w^O = .325$ ($s.e. = .033$).

4.1 Diagonal reference models with covariates

The results of our analyses so far fail to support any of the three versions of the social mobility argument. To investigate further, we now consider diagonal reference models with covariates, i.e. models 4, 5 and 6. Their deviance (G^2) are 33,599 (model 4, $df = 36,408$), 34,570 (model 5, $df = 36,414$) and 33,597 (model 6, $df = 36,406$).[13] Similar to what we saw in Table 4, model 5, which assumes that $w^V = 1$, fits the data much more poorly than model 4, which allows w^V to vary freely. This does not support the composition effect argument.[14] As regards the asymmetry argument, we note that the deviance of model 6 is only marginally smaller than that of model 4: a difference of 2 for two degrees of freedom is not a significant improvement in model fit. Thus, as before, we prefer the more parsimonious model 4 to the more complex model 6, and conclude that there is no evidence to support the asymmetry argument.

The critical test for the diverse exposure argument is whether, under our preferred model 4, first-generation graduates are more omnivorous than second-generation graduates. But let us briefly review the covariates first. The left-hand and central panels of Table 5 show the P v I and the O v I contrasts respectively. As expected, compared with university graduates, people with intermediate or no qualifications are less likely to be paucivores (or omnivores) rather than inactives. The same is true for ethnic minorities, people with children aged 0 to 4, and those living outside London (with the exception of the North East). But older people, people with children aged 5 to 11, those with higher income or of higher social status are more likely to consume visual arts. Also, women are less likely than men to be omnivore rather than inactive.

We have also reparametrised model 4 using paucivores rather than inactives as the reference category. The parameter estimates for the O v P contrast are reported in the right-hand panel of Table 5. They are mostly comparable to those of the left-hand and central panels. But we also see that parents of children aged 5 to 11 are less likely to be omnivores rather than paucivores, and income and some of the regional dummies are not significant in the O v P contrast. Overall, these results are very similar to those reported by Chan and Goldthorpe (2007).

To give a sense of the substantive magnitude of the various parameters, Figure 3 reports the predicted probabilities of latent class membership under

[13] Because model 4, 5 and 6 are based on individual level data, their deviances are much larger than those of models 1, 2 and 3.

[14] Under model 4, $w^P = .301$ ($s.e. = .027$) and $w^O = .358$ ($s.e. = .018$). These estimates also strongly suggest the weight parameters are significantly different from 1.

Table 5: Parameter estimates under model 3

	P v I		O v I		O v P	
	β	*s.e.*	β	*s.e.*	β	*s.e.*
intermediate	-1.108**	0.059	-2.047**	0.076	-0.934*	0.071
no qual	-1.889**	0.082	-3.715**	0.134	-1.820**	0.130
age	0.021**	0.001	0.027**	0.002	0.005*	0.002
female	-0.066	0.035	-0.186**	0.048	-0.119*	0.046
single	0.104*	0.052	0.100	0.070	-0.003	0.069
div/sep/wid	0.095	0.065	0.044	0.092	-0.051	0.090
child 0–4	-0.245**	0.049	-0.666**	0.073	-0.420**	0.072
child 5–11	0.376**	0.044	0.167**	0.064	-0.209**	0.062
child 12–15	-0.035	0.049	-0.071	0.071	-0.036	0.069
black	-0.663**	0.084	-1.618**	0.147	-0.954**	0.148
asian	-0.943**	0.130	-1.852**	0.228	-0.908**	0.232
others	-0.203	0.114	-0.397**	0.154	-0.192	0.149
income	0.133**	0.028	0.121**	0.039	-0.012	0.038
status	0.694**	0.055	1.275**	0.079	0.581**	0.079
North East	-0.136	0.101	-0.141	0.131	-0.004	0.127
North West	-0.353**	0.073	-0.678**	0.098	-0.325**	0.094
Yorkshire	-0.172*	0.079	-0.311**	0.104	-0.138	0.099
East Midlands	-0.477**	0.083	-0.602**	0.111	-0.125	0.109
West Midlands	-0.458**	0.077	-0.912**	0.110	-0.453**	0.107
East of Eng	-0.331**	0.075	-0.841**	0.103	-0.510**	0.099
South East	-0.115	0.068	-0.408**	0.087	-0.293**	0.081
South West	-0.315**	0.079	-0.481**	0.103	-0.166	0.098
Wales	-0.482**	0.095	-1.148**	0.148	-0.665**	0.146
Scotland	-0.242**	0.079	-0.310**	0.100	-0.068	0.095
N.Ireland	-0.561**	0.116	-1.243**	0.190	-0.681**	0.190

Note: * $p < .05$, ** $p < .01$

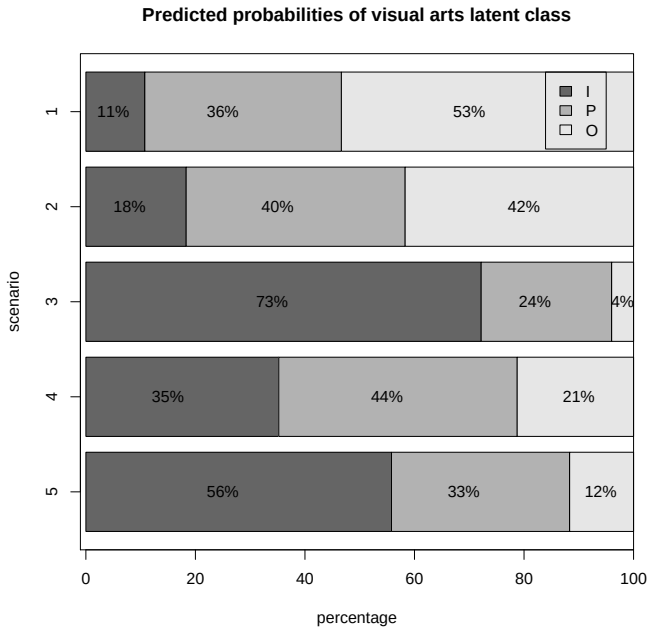
model 4 for different sets of covariate values. Consider a 40-year-old white woman with a monthly household income of £3,000. She is childless, and she lives in London with a partner.[15] Suppose that she is a second-generation university graduate and works as a Higher Professional (e.g. an accountant) which is at the top of the status scale of Chan and Goldthorpe (2004). Under this scenario, the probability of her being an omnivore is 53%. But if she works as a Manager or Proprietor in Services (e.g. a hotel manager) which is of middling status, while all other covariates remain unchanged (scenario 2), then her probability of being an omnivore stands at 42%. The difference between scenarios 1 and 2 gives us a sense of the magnitude of the status effect.[16]

In scenarios 3 through 5, our hypothetical woman still works as a Manager or Proprietor in Services. But we vary her educational level and that of her parents. If both she and her parents have no qualifications (scenario 3), then her probability of being an omnivore drops to just 4%. Clearly, the education effect is, in substantive terms, much larger than the status effect.

In scenario 4, our hypothetical woman achieves upward educational mobility. That is, her parents have no qualifications, but she is a university graduate. Under this scenario, her probability of being an omnivore is 21%. In the case of downward mobility (i.e. she has no qualifications, but her parents are university graduates, scenario 5), the probability is 12%. The important point to note here is that where our hypothetical woman is educationally mobile, either upward or downward, she is considerably *less* likely to be a visual arts omnivore, compared to the situation where she is a second-generation university graduate (i.e. compare scenarios 4 and 5 with scenario 2). Furthermore, although there are slightly more paucivores among first generation graduates (scenario 4, 44%) than among second-generation graduates (scenario 2, 40%), the share of inactives is much higher among the former than among the latter (35% v 18%). Overall, the results of the diagonal reference models with covariates point to the same conclusions as those without covariates.

[15] These are mean or modal values of the covariates (or very nearly so). See Table 10 in Appendix C for details.

[16] The status effect between scenarios 1 and 2 refers to about half of the overall range of the status scale. We choose to contrast Higher Professional with Manager or Proprietor in Services rather than with General Labourer (which is at the bottom of the status scale) because there are relatively few second-generation university graduates working as General Labourers, making that combination of covariate values unlikely.



Note: occupation and education of a hypothetical woman set as follows:
scenario 1: Higher Professional, graduate (own), graduate (parents)
scenario 2: Manager or Proprietor in Services, graduate (own), graduate (parents)
scenario 3: Manager or Proprietor in Services, no qual (own), no qual (parents)
scenario 4: Manager or Proprietor in Services, graduate (own), no qual (parents)
scenario 5: Manager or Proprietor in Services, no qual (own), graduate (parents)

Figure 3: Predicted probabilities of latent class membership under model 3

5 Summary and discussion

Many scholars see social mobility as playing a key role in explaining the emergence of cultural omnivores. In this paper, we discuss three versions of the social mobility argument and show that none of them receives empirical support from recent survey data on visual arts consumption in the UK.

To elaborate, visual arts consumption is very far from being determined by primary socialisation at the family of origin. Instead, the educational attainment of individuals carries about three times as much weight as their parents' education. (When covariates are taken into account, the ratio is lower, but is still at the level of about two-to-one.) This is inconsistent with the composition effect argument. Furthermore, as this three-to-one (or two-to-one) ratio applies equally to both upwardly mobile and downwardly mobile individuals, there is no support for the asymmetry or status maximisation argument. Finally, socially mobile individuals, whether they move upwards or downwards, are actually *less* omnivorous than those who are intergenerationally stable in advantaged positions. In particular, first-generation university graduates are *less* omnivorous than second-generation graduates. This contradicts the diverse exposure argument.

In the introductory section of this paper, we argue that cultural democratisation and social mobility are two complementary social forces that might explain the emergence of cultural omnivores. Given the lack of empirical support for the latter, it seems to us that scholars should turn their attention to the former as a more promising avenue for further exploration. We recognise that this is a considerable challenge, as the long-term social-structural, cultural and institutional changes that we briefly review in Section 1 are many and varied; and not all of them will apply with equal validity in all countries. So careful historical and institutional analyses that are sensitive to cross-national differences as well as similarities will be needed to disentangle and assess the variegated claims.

Nonetheless, as noted above, these claims of cultural democratisation all imply that cultural boundaries are weakening. We do not deny that the distinctions between high-brow, middle-brow and low-brow cultures still exist. For example, most people would still regard opera but not street graffiti as high-brow culture. But there is a good deal of cultural crossover: some opera singers release pop albums, while the work of some graffiti artists is exhibited in art galleries and sold in auction houses at fantastic price.

The blurring of cultural boundaries is mirrored by the declining significance of high culture as a status marker. Consider the founding of the Metropolitan Opera in the 1880s as recounted by Beckert (2001, p. 247). After Vanderbilt, the railroad magnate, was snubbed by the then dominant New

York Academy of Music, he and other industrialist- and financier-upstarts in New York founded the Metropolitan Opera and eventually drove the New York Academy out of business. If a private box in an opera house was the required statement of acceptance into 'society' of that era, it does not seem to be the case any more. The rich and powerful of today certainly still flaunt their wealth. But they do not have to do so through sponsoring high culture. Instead, owning a sports team or conspicuous consumption of material luxury such as private jets or superyachts have become *de rigueur* (Frank, 1999).

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A Latent class analysis

Of the five types of visual arts events listed in Table 1, most respondents would probably see items 1 and 2 as representing high-brow visual arts, with item 2 being perhaps relatively *avant-garde*. Items 3 and 4 refer to visual arts that are found 'on the street', including, say, sculptures of Henry Moore or Barbara Hepworth, but also street graffiti, and displays of ethnic masks and carvings, batik and embroideries, and other folk crafts in cultural festivals. We consider these two items as representing 'popular' forms of visual arts. Finally, item 5 is problematic as it lumps together museums and galleries. As Chan and Goldthorpe (2007, p. 173) observe, 'some museums—for example, natural history, industrial or local or regional museums—while no doubt displaying many objects of visual interest may not contain much in the way of "works of art" as usually understood.' For this reason, many respondents might see item 5 as representing visual arts of a middling kind.

Table 6 reports the goodness of fit statistics of latent class models. None of the models achieves a satisfactory fit with the data by the conventional criterion of 5% type I error. But given the large number of observations in the contingency table ($N = 28,657$), we accept model 4 as providing an adequate summary of the data.[17]

Table 7 reports the latent class solution under model 4. It can be seen that members of the largest latent class, which accounts for 58% of the respondents, are quite inactive in the visual arts. Over a twelve months period, only one in nine (11%) had been to a museum or gallery; and one in twelve (8%) had been to a carnival. The participation rates at other visual arts events are even lower at 3% or less.

[17]With four latent classes, the smallest class 3 of model 4 would be split into two subclasses. Moreover, this four-class model has a higher BIC value of -50.40. Using BIC as the model selection criterion, we prefer model 4 of Table 6 (with three latent classes) to the four-class model.

Table 6: Goodness of fit statistics of latent class models

model	# latent class	G^2	*df*	*p*	BIC	Δ
1	1	19635.10	26	.000	19368.46	.000
2	2	972.39	20	.000	767.28	.043
3	3	238.07	14	.000	94.49	.116
4	3*	61.25	12	.000	-61.82	.154

Note: * In model 4, two residual local dependence terms are added between the indicators for 'street arts' and 'carnival', and between 'video arts' and 'carnival'.

In contrast, although the smallest latent class accounts for only 13% of the sample, its members are keen consumers of the visual arts across the board. Almost all of them had visited a museum or galley (95%), or an exhibition of art, photography or sculpture (97%); more than a third (38%) had visited a video or electronic arts event; and even for street arts and carnival their participation rate is still the highest of all. Finally, there is a third group that is intermediate both in terms of its size (29% of the sample) and the level of visual arts consumption of its members.

Table 7: Latent class solution under model 4

	1 (I)	2 (P)	3 (O)
relative size	0.578	0.290	0.133
exhibition	0.006	0.530	0.971
video arts	0.016	0.049	0.387
street arts	0.029	0.170	0.750
carnival	0.080	0.191	0.302
museum	0.114	0.769	0.946

B Cohort-specific analyses

The educational system of the UK has expanded a great deal but at an uneven pace after the Second World War. Because our respondents span a wide age range (they were between the ages of 20 and 64 at the time of the interview), their experience of educational mobility is very variable. To check whether this has any bearing on the mobility effects on cultural consumption, we have repeated our analysis on three birth cohorts separately. The three cohorts are defined as respondents aged 50–64, 36–49 and 20–35 in 2010–11.

Table 8: Distribution of respondents by parents' education and own education for three cohorts (cell percentages)

	respondent			
parents	degree	immediate	no qual	overall
Panel A (aged 50–64)				
degree	4.1	2.6	0.3	7.0
intermediate	12.3	23.2	8.7	44.2
no qual	5.5	22.4	20.9	48.8
overall	21.9	48.2	29.9	100.0
Panel B (aged 36–49)				
degree	8.2	4.7	0.4	13.3
intermediate	17.2	35.9	7.1	60.2
no qual	4.2	13.9	8.5	26.5
overall	29.5	54.5	16.0	100.0
Panel C (aged 20–35)				
degree	12.7	9.6	0.4	22.6
intermediate	17.8	42.1	3.8	63.7
no qual	1.8	9.0	2.8	13.6
overall	32.3	60.7	7.0	100.0

Table 8 corresponds to Table 3 in the main text. It reports the distribution of the respondents by their own educational level and that of their parent. Starting with the marginal distributions of the respondents (i.e. the destination marginals), we see that the share of graduates increases progressively from 22% through 30% and then to 32% across the three cohorts. Correspondingly, the share of those without qualifications drops from 30% to 16%, and then 7%. This, of course, speaks to the educational expansion of British society. However, in terms of educational mobility, it was the oldest cohort who experienced the most dramatic change, with the share of graduates tripling from origin (7%) to destination (22%) in Panel A. Indeed, the cells on the main diagonal account for 48%, 53% and 58% of the respondents in Panels A, B and C respectively. That is to say, educational immobility (in the absolute sense) has increased across cohorts. Furthermore, upward mobility rate has declined, with the cells below the main diagonal accounting for 40%, 35% and 29% of the respondents in the three panels. Finally, the rate of downward mobility (cells above the main diagonal) has remained relatively stable at 12%, 12% and 14% respectively.

Table 9 reports the goodness of fit statistics of the three diagonal reference models (without covariates) applied to data from the three cohorts separately.

Table 9: Goodness of fit statistics of diagonal reference models for three cohorts

model	G^2	df	p	model comparison	ΔG^2	Δdf	p
Panel A: respondents age 50–64							
1	8.139	10	0.62				
2	1072.549	12	0.00	2–1	1064.410	2	0.00
3	5.718	8	0.68	1–3	2.421	2	0.30
Panel B: respondents age 36–49							
1	13.059	10	0.22				
2	902.617	12	0.00	2–1	889.558	2	0.00
3	12.794	8	0.12	1–3	0.265	2	0.88
Panel C: respondents age 20–35							
1	9.153	10	0.52				
2	663.218	12	0.00	2–1	654.065	2	0.00
3	8.319	8	0.40	1–3	0.834	2	0.66

Note: G^2 is the deviance of the model, df refers to its degree of freedom, and p is the probability of Type I error.

Essentially, they give the same results as Table 4. For all three cohorts, model 1 fits the data very well. This suggests that we should reject Hypothesis 2 or the diverse exposure argument. Model 2 (which requires $w^V = 1$) fits the data poorly. So we should also reject Hypothesis 1 or the composition effects argument. Finally, model 3 (which allows w^V to differ between upward and downward mobility) does not imrove on model 1, thus lending no support to the asymmetry effect argument or Hypothesis 3.

C Descriptive statistics

Table 10: Descriptive statistics

	%	mean	s.d.
degree	26.6		
intermediate	54.7		
no qual	18.7		
degree (parents)	14.5		
inter (parents)	56.3		
no qual (parents)	29.3		
female	54.6		
couple	68.4		
single	21.8		
div/sep/wid	9.8		
child 0–4	17.7		
child 5–11	20.0		
child 12–15	13.8		
white	89.9		
black	5.3		
asian	2.3		
others	2.5		
London	13.3		
North East	4.2		
North West	11.1		
Yorkshire	8.4		
East Midlands	7.1		
West Midlands	8.9		
East of England	9.3		
South East	13.6		
South West	8.3		
Wales	4.6		
Scotland	8.5		
N.Ireland	2.8		
age		42.0	(12.6)
log monthly household income		8.0	(0.9)
social status		0.0	(0.4)