
Social Stratification and Cultural Consumption: Music in England

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In this article we use recent survey data to test three arguments on the relationship between social stratification and cultural consumption: i.e. what we label as the homology, individualization and omnivore–univore arguments. We note various conceptual and methodological problems in the ways these arguments have been advanced, and stress in particular the importance of maintaining the Weberian distinction between class and status. We concentrate on musical consumption and apply latent class models to identify types of musical consumer. We then examine the social character of these types through a regression analysis that includes a range of demographic and stratification variables. As would be anticipated from a Weberian standpoint, type of musical consumption proves to be more closely associated with status, and also with education, than with class. In general, our results provide little support for the homology or individualisation arguments. They are more consonant with the omnivore–univore argument, although a number of qualifications to this are also suggested.

Introduction—The Three Arguments

In the current sociological literature that treats the relationship between social stratification and cultural taste and consumption, it is possible to identify three main—and rival—lines of argument, each, though, with its variant forms. For convenience, we will refer to (i) the homology argument; (ii) the individualization argument; and (iii) the omnivore–univore argument. In this article, we begin by briefly outlining these three positions.¹ We also note some conceptual and methodological problems that arise, and indicate how we would ourselves propose to deal with these problems. We then go on to report results from a research project in which we are engaged on cultural

consumption in contemporary British society. While these results are limited to one particular cultural domain, that of music, this focus has, we believe, some strategic advantages in evaluating the current debate.

The Homology Argument

In its simplest form, this argument claims no more than that social stratification and cultural stratification map closely on to each other. Individuals in higher social strata are those who prefer and predominantly consume ‘high’ or ‘elite’ culture, and individuals in lower social strata are those who prefer and predominantly consume ‘popular’ or ‘mass’ culture—with, usually, various intermediate situations also being recognized. A recent restatement of the argument on these lines is provided by Gans (1999, vii–viii esp). However, more elaborate

versions of the homology argument exist, and notably that developed by Pierre Bourdieu in his book, *Distinction*, which, for reasons that will later become apparent, is of particular interest to us.

As best we can understand the essentials of Bourdieu's position, they are as follows.² On Bourdieu's own account (Bourdieu, 1984, p.xii), *Distinction* starts out from 'an endeavour to rethink Max Weber's opposition between class and *Stand*'. Bourdieu agrees with Weber (1968, p.932) that status position—position within a generally recognized hierarchy of social superiority and inferiority—is expressed by 'above all else a specific *style of life*'. But he then rejects Weber's view of the class position of individuals or groups as being analytically and empirically separable from their status position in that class position is determined purely by *economic* relations—i.e. relations in labour markets and production units. For Bourdieu, class and status are not to be understood as different forms of social stratification that can be linked, as Weber puts it, 'in the most varied ways'. Rather, status has to be seen as the symbolic aspect or dimension of the class structure, which is not itself reducible to economic relations alone.

Thus, it is not possible for Bourdieu to accept that the relationship between class and status—and thus lifestyle—is, at least to some degree, a contingent one. A necessary correspondence, or homology, has to be recognized. This homology is crucially mediated, Bourdieu claims, by the *habitus* of different classes. That is, by the socially constituted 'system of dispositions' that members of a class come to acquire as a result of the specific 'class conditions' under which they live. The class *habitus* produces a 'semantic' unity in practices across all domains of consumption, cultural consumption included. And thus, within and integral to the class structure, there are created the internally coherent but sharply contrasting lifestyles that are expressed by the status order. In turn, then, rivalry and competition within this order are not to be seen as separate from class divisions and conflict, let alone as serving, perhaps, to inhibit class-based action (Weber, 1968, p.930). To the contrary, the status order is the field of symbolic struggle between classes, in which those involved seek to 'classify' themselves and others as same or different, included or excluded, and in which members of the dominant class use 'symbolic violence' in order to confirm the superiority of their own lifestyle by arrogating to it those cultural forms that are generally recognized as 'canonical', 'legitimate', or otherwise 'distinguished'. It is in fact in this last respect, as Weininger (2005, p.95) has observed,

that 'the full significance of Bourdieu's attempt to yoke together "class" and "status" becomes apparent'.³

The Individualization Argument

The individualization argument may be regarded, if not as a more or less direct contradiction of the homology argument, then at all events as an attempt to restrict the validity of that argument to the past. What essentially is held is that, in the economically advanced societies of the present day, differences in cultural taste and consumption and indeed in lifestyles generally are losing their grounding in social stratification, however this may be understood, and are becoming more a matter of individual 'self-realization'.

In weaker versions of the argument, the suggestion is that other structural bases, such as age, gender, ethnicity, or sexuality, are now at least as important as class or status in conditioning lifestyles, and that individuals are in this way given a much greater range of choice as regards the collectivities, real or imagined, with which they will subjectively align themselves and, in turn, greater possibilities for forming—or recreating—their own identities (e.g. Giddens, 1991; Beck, 1992). However, in stronger versions, often developed under postmodernist influences, lifestyles are seen as now lacking any kind of structural grounding or indeed inherent unity. Individuals are increasingly able to form their own lifestyles independently of their social locations, and primarily through their patterns of consumption and demonstration of taste, to 'construct' their own selves more or less at will (e.g. Bauman, 1988, 2002). Here, then, the contrast with Bourdieu's position is striking. The emphasis shifts dramatically, as Warde (1997, p.8) has put it, 'from *habitus* to freedom'. Instead of being permanently marked by their initial class socialization and restricted to a limited set of predefined lifestyles, individuals not only can but *have* to choose—to 'pick-and-mix'—from the vast array of possibilities that the highly commercialized 'consumer societies' of today make available to them: lifestyle becomes a 'life project'.

The Omnivore–Univore Argument

The first point to note about this argument is that it relates more specifically to cultural consumption than to lifestyles in general. In its substance, it can perhaps be traced back to the findings of empirical research as early as that of Wilensky (1964) who reported that in the United States highly educated persons had rarely any strong aversion to 'mass' culture and indeed often

enjoyed it at least in some forms. However, in its present-day terms, the argument would appear to originate with Peterson and Simkus (1992). The broad hypothesis that is advanced—and that is seen as having received support from empirical research (e.g. Peterson and Simkus, 1992; Peterson and Kern, 1996)—is that in modern societies the homology argument is outmoded, not because cultural consumption has lost all grounding in social stratification, but because a new relationship is emerging. Rather than cultural stratification mapping straightforwardly onto social stratification, the cultural consumption of individuals in higher social strata differs from that of individuals in lower strata chiefly in that it is greater *and much wider in its range*—comprising not only more ‘high-brow’ culture but in fact more ‘middle-brow’ and more ‘low-brow’ culture as well. Thus, the crucial contrast is not that of ‘snob versus slob’ but that of cultural omnivore versus cultural univore.

The omnivore–univore argument might then be seen as a ‘middle way’ between the homology and individualization arguments previously considered (Warde *et al.*, 2000). It is, however, open to at least two interpretations that endow it with clearly differing significance.

On the one hand, omnivores may be seen as essentially tolerant individuals (because, say, of their relatively high levels of education and/or social mobility) who have a general openness to other cultural styles than that into which they were initially socialized and further, perhaps, a desire to experiment with different kinds of cultural consumption. In this case, there is a fairly obvious affinity with the individualization argument. Omnivore cultural consumption is concerned more with self-realization than with setting down status markers and creating social distinction (cf. the discussion of ‘the new middle class’ in Wynne and O’Connor, 1998). On the other hand, though, omnivores may be seen as expressing a new aesthetic which, even if more inclusive and ‘cosmopolitan’ than that of earlier cultural elites, is no less directed towards the demonstration of cultural *and* social superiority—that is, when set against the very restricted cultural styles of univores (Sintas and Álvarez, 2002). And, in turn, omnivores may still show discrimination, either in the *uses* that they make of mass or popular culture—e.g. often ‘ironic’ or otherwise condescending uses—or in still rejecting some of its particular forms, such as ones with an especially close association with low-status groups (Bryson, 1996). In this case, then, the omnivore–univore argument could be regarded as taking over a good deal from the homology argument. The mapping

of cultural onto social stratification is understood in a more sophisticated way but cultural consumption is still seen as playing a central part in creating symbolic boundaries and in status rivalry and competition.

Conceptual and Methodological Problems

The three broad positions outlined above have been widely debated and, to an increasing extent, on the basis of empirical research. However, examination of this research reveals certain recurrent problems of conceptualization and method that call for more attention than they have so far received (though see Warde *et al.*, 2000b). Here we focus for the most part on two problem-areas that relate to the ‘dependent’ and ‘independent’ variables that are central to our own empirical analyses: i.e. cultural consumption and social stratification.

In most previous work, a distinction is in principle accepted between cultural consumption, on the one hand, and cultural taste or knowledge, on the other. However, in actual research practice, the distinction seems often to be elided. Thus, respondents to surveys may be asked about their cultural tastes—i.e. their likes and dislikes—or perhaps ‘tested’ on their cultural knowledge; but then at some point in analyses based on this information, it becomes interpreted, if only implicitly, as if it were in fact information on actual consumption which, clearly, it is not.⁴ For some purposes, a concern with cultural taste or knowledge, regardless of whether or not these are reflected in consumption, may indeed be appropriate. But insofar as one is concerned with the part played by cultural style in processes of social stratification, it is on consumption *as a form of social action* that attention must focus. In this perspective, for an individual to have actually been at the opera or have Monteverdi or modern jazz playing on the stereo when the guests arrive is more important than whether or not they claim to like opera, Monteverdi or modern jazz, or are knowledgeable about them. In our own work, therefore, it is on evidence of cultural consumption rather than taste that we wish to concentrate.

Turning now to social stratification, we would note first of all that in this regard conceptualization is often very loose and that indicators, such as occupation, education, or income, are used with no very clear rationale. There are few examples where a range of well-defined stratification variables is constructed and then applied in multivariate analyses;⁵ and in turn, little light has been thrown on the possibly differing processes, or mechanisms, through which social ‘gradients’ in cultural consumption are actually generated.

For example, if, when other stratification variables are controlled, an income gradient is still shown up, this could more readily be taken as pointing to the importance simply of ability to pay; or, again, a persisting gradient by educational attainment would lend stronger support to the idea that an individual psychological factor—such as information processing capacity—is at work, as has been suggested by various proponents of ‘empirical aesthetics’ (Berlyne, 1974; Moles, 1971; Ganzeboom, 1982).⁶

Furthermore, if cultural consumption is to be related to the *structure* of inequality in society, the question arises of how this structure should itself be envisaged. In this regard, we appreciate Bourdieu’s readiness to take seriously the distinction between class and status that was proposed by Weber, but we believe that his attempt to transcend this ‘opposition’ is not well considered. Especially in addressing issues of cultural and social stratification, it is, in our view, analytically preferable to follow Weber and to see class and status as qualitatively different forms of social stratification, the connection between which is empirically variable, rather than to follow Bourdieu and to treat the status order as being the ‘symbolic’ dimension of the class structure more or less by *fiat* (see further Chan and Goldthorpe, 2004, 2006). From a Weberian point of view, one would in fact expect that cultural consumption, as an aspect of lifestyle, will be more strongly associated with status than with class—whatever the specific form this relationship may take; and, further, that in so far as systematic discrepancies do exist between the positions of individuals and groups in the status order and in the class structure (the latter being defined by economic relations—i.e. relations within labour markets and production units), these discrepancies will then be reflected in differences in patterns of cultural consumption *within* classes.⁷

There is, finally, one other methodological point of a quite different kind that we need also to note. The individualization and omnivore–univore arguments concern change over time. Both aim to replace the homology argument with an understanding of the relationship between cultural and social stratification that is seen as more appropriate to the present day. But, in fact, few of the empirical studies that have taken up these arguments have an over-time dimension (the main exception being Peterson and Kern, 1996). We are not, for the time being at least, in a position to improve matters in this regard. We can only keep in mind that our data and analyses do pertain to just one point in time, and hope that they may in due course serve as baseline for further research

so that questions of change can be more adequately addressed.

Data and Analytical Strategy

Our data come from the Arts in England Survey carried out in England in 2001 by the Social Survey Division of the UK Office for National Statistics on behalf of Arts Council England. Face-to-face interviews were carried out with a stratified probability sample of individuals aged over 16 and living in private households. Interviews were completed with 6,042 respondents, giving a response rate of 64 per cent (for details, see Skelton *et al.*, 2002).

The inquiry was concerned with assessing attendance at cultural events and participation in cultural activities, very broadly understood. In later analyses we shall aim to take advantage of this unusually wide coverage. In the present article, however, we concentrate on just one cultural domain: that of music. This, we believe, represents an appropriate starting point. Music has often been seen as having special significance in regard to the social stratification of cultural style. Bourdieu (1984, p.18), for example, claims that ‘nothing more clearly affirms one’s “class”, nothing more infallibly classifies, than tastes in music’. And analyses of musical taste and consumption have in fact figured prominently in current debates (e.g. Bryson, 1996, 1997; van Eijck, 2001; Coulangeon, 2003) in part because research in this area was closely associated with the development of the omnivore–univore argument (Peterson and Simkus, 1992).

In the Arts in England Survey, questions were directly asked about attendance at musical events as well as listening to music through various media. In many other data sets that have been used in analyses of musical consumption, information is available on listening only, without any distinction being possible as to whether listening was ‘live’ or not. This is, however, a distinction that from our standpoint is important and that we seek fully to exploit.

As regards musical events, respondents were asked whether in the last 12 months they had attended: a classical music concert, an opera or operetta, a jazz concert, or a pop or rock concert. We take as our dependent variables whether (or not) attendance was reported at each of these kinds of event.⁸ As regards listening to music, respondents were asked whether in the last four weeks they had listened, through any medium (radio, TV, CDs, records, tapes, etc.), to the same four genres of music. Again, we take as our dependent variables whether (or not) any listening was

reported to each of these kinds of music, whatever the medium. On this basis, then, we have in total eight different types of musical consumption that respondents might or might not have engaged in over a specific time-period: live and media consumption of the four genres of classical music, opera or operetta, jazz, and pop or rock.

These genres are not as refined as might ideally have been wished, and they would scarcely form a satisfactory basis for a study focusing on the specifics of musical taste. However, to repeat, our concern here is with actual cultural consumption in the domain of music and, further, with using information on such consumption in order to test the three arguments that we outlined at the start. As we will seek to show in what follows, the data that we have available do in fact allow us to pursue this goal effectively (see also note 17 below).

Apart from its emphasis on consumption rather than taste, the Arts in England Survey is also well suited to our purposes in that it obtained information on a wide range of respondents' socio-demographic characteristics. Respondents were coded to the National Statistics Socio-Economic Classification (NS-SEC), which is in effect a new instantiation of the Goldthorpe class schema (Rose and Pevalin, 2003); and from the detailed occupational codings that are also available, we are able to allocate respondents to the 31 categories of the social status scale that we have earlier developed (Chan and Goldthorpe, 2004).⁹ In addition, information is available on respondents' income and educational qualifications (coded to the six official National Vocational Qualifications levels), and further on a range of attributes that are of potential interest to us as control variables, including sex, age, marital status, family composition, and region of residence (see Table 6 below). We have restricted our analysis to respondents aged 20–64 ($N=4,249$) since preliminary analyses pointed clearly to the desirability of undertaking separate analyses of the cultural participation of both younger and older groups. After deleting cases with missing values on the key covariates of income, education and social status the analytical sample size becomes 3,819.

Results

We begin by showing in Table 1 the overall proportions of respondents to the Arts in England Survey who engaged in the eight types of musical consumption that we identified earlier. It can be seen

Table 1 Percentage of respondents who have attended live music events in the past 12 months, or have listened to music via media in the past 4 weeks

	live	media ^a
Opera/operetta	5.7	16.3
Jazz	6.3	24.7
Classical	10.2	51.9
Pop/rock	23.2	88.5

Note: ^aincludes radio, CD, mini disc, tape, record, television, DVD, or video.

that, as might be expected, rates of live consumption were lower than rates of media consumption, even over a 12-month as compared with a four-week period. Further, there is some wide variation across genres. Most obviously, opera and operetta (henceforth 'opera') and jazz attract far fewer live consumers (henceforth 'attenders') and media consumers ('listeners') than does pop or rock ('pop').

Latent Class Measurement Models

In order to move on from data in the form of Table 1 to gain an understanding of patterns of musical consumption among respondents, we turn to latent class analysis. The binary responses to the eight questions on musical consumption represented in Table 1 can be understood as forming an eight-way contingency table with 256 (i.e. 2^8) cells. What we wish to know is whether, underlying these data, there are certain relatively well-defined types of musical consumer. Latent class analysis, which can be regarded as the categorical counterpart of factor analysis for continuous variables, is therefore an appropriate technique to apply. Latent class models seek to capture the association that exists among the observed indicators of some phenomenon—in our case, the eight indicators of musical consumption—through a small number of discrete latent classes.¹⁰ In effect, this association is regarded as resulting from a mixture of 'pure' types within the population studied, so that if these types can be identified and separated as latent classes, then *conditional on membership of these classes*, the indicators will become statistically independent of each other. This principle of 'local independence' is key to all latent variable analyses, including latent class models (McCutcheon, 1987).¹¹ However, we should note that in the present article, we do, pragmatically, depart from it in one respect. We allow for specific local *dependence* between live and mediated consumption of music of the same genre.

Table 2 Latent class measurement models fitted to data on musical consumption

# classes	G ²	df	P	BIC
1	1583.63	243	0.00	-420.57
2	387.55	234	0.00	-1542.42
3	222.96	225	0.52	-1632.78
4	175.32	216	0.98	-1606.19

Note: Four local dependence terms are included to account for residual association between indicators of live and mediated consumption of music of the same genre.

Substantively, it is reasonable to expect there to be some residual association even within latent classes between attending live opera, classical music, jazz, or pop performances and listening to these same genres through various media. And, empirically, the inclusion of these four local dependencies improves quite dramatically the fit of all latent class models that we apply.¹²

As can be seen from Table 2, the results of our latent class modelling, with the modification indicated above, are in fact fairly straightforward. A model postulating three latent classes fits the data satisfactorily according to the usual criterion of five per cent type I error.¹³ If we were to postulate four latent classes, we could achieve an almost perfect fit with the data ($P = 0.98$). Using the likelihood ratio test, model 4 represents a significant improvement over model 3 (for $\Delta G^2 = 47.64$ and $\Delta df = 9$, $P = .00$). But model 4 is not the preferred model under BIC. More importantly, we believe model 4 overfits the data (see further note 15 below). Bearing in mind the tradeoff between goodness of fit and parsimony, we choose model 3 as our preferred model.

The solutions of the three-class and also of the simpler two-class model of Table 2—i.e. the estimated relative sizes of the latent classes and the estimated conditional probability of consuming each of the eight items, given membership in a latent class—are reported in Table 3. A comparison of these two models suggests that the main difference between them is that the smaller latent class under two-class model needs to be further differentiated. On the basis of these results, we can then already make some relevant commentary on the three arguments that we previously outlined, even before we consider the social covariates of latent class membership.

Most obviously, perhaps, the very fact that we are able to identify three latent classes, each representing a relatively well-defined type of musical consumer, must throw doubt on the individualization argument,

Table 3 Estimated relative sizes of latent classes and conditional probabilities of different forms of musical consumption under the 2- and 3-class models

	2-class model		3-class model		
	1	2	1	2	3
Relative size (%)	68.9	31.1	65.7	24.0	10.3
Opera (l)	0.010	0.162	0.013	0.039	0.386
Jazz (l)	0.024	0.150	0.027	0.075	0.273
Classical (l)	0.017	0.291	0.024	0.060	0.701
Pop/rock (l)	0.225	0.249	0.225	0.234	0.277
Opera (m)	0.016	0.488	0.011	0.418	0.541
Jazz (m)	0.125	0.517	0.112	0.509	0.499
Classical (m)	0.313	0.973	0.289	0.952	0.977
Pop/rock (m)	0.903	0.845	0.899	0.905	0.749

Note: (l): attending live concerts, (m): listening to music through media. The conditional response probabilities reported in this table are marginal probabilities, obtained by summing over the relevant joint probabilities within latent class. For details, see Vermunt and Magidson (2005, p.69, 70).

at least in its extreme, postmodernist versions: i.e. those that would claim the break-up of all pattern or coherence in consumption itself as well as in its linkages with social stratification. We are evidently far removed from any such situation.¹⁴ It may well be that individualization finds expression in detailed differences in taste and in related consumption *within* the broad genres that we distinguish. None the less, it is apparent from our results that, on a larger view, musical consumption, is in fact highly structured.

Turning next to the homology argument, it might be suggested that members of our latent class 1 under model 3 are very plausible exemplars of popular or ‘mass’ consumption in the musical domain. They account for about two-thirds of all respondents and are very likely to listen to pop music via the media ($P = 0.90$) but otherwise have relatively low levels of musical consumption. However, if we can thus rather readily identify a potential ‘mass’, there is little evidence to be found in Table 3 for the existence of a musical ‘elite’, at least in the sense of a group who, while actively expressing ‘high’ musical taste, at the same time reject—or, to use Bourdieu’s phrase, display ‘aesthetic distance’ from—more popular musical forms.¹⁵ Members of our latent class 3, the smallest of the three (10.3%), have overall the highest probability of attending operas, jazz, and classical concerts but *also* of attending pop concerts. And while they again have high probabilities of listening to opera, jazz, and classical music through the media, their probability of listening to pop is likewise high

in absolute terms ($P = 0.75$) and not very much lower than that of the members of the two other latent classes.¹⁶

This being so, it might be said that our results so far chiefly favour the omnivore–univore argument, although still in this case some qualifications are also suggested. On the one hand, while musical consumption in latent class 1 is clearly more restricted than in the other two classes, it is not entirely univorous. There is some non-negligible probability ($P = 0.29$) of listening to classical music in addition to popular forms, which can, perhaps, be understood as a ‘crossover’ or a ‘Classic FM’ effect, and would merit further investigation. And, on the other hand, while members of latent class 3 do have an obvious claim to be regarded as musical omnivores, latent class 2, which is larger than latent class 3, also shows omnivorous tendencies so far as listening to music rather than attending musical events is concerned—suggesting, that is, a need to distinguish various degrees and kinds of omnivore.

None the less, with these qualifications being kept in mind, it would seem reasonable, and not unduly misleading, if we were to provisionally label our latent classes according to the univore–omnivore argument, on the following lines: latent class 1 as univores (Us), latent class 2 as omnivore–listeners (OLs), and latent class 3 as true omnivores (Os).¹⁷

Incorporating Covariates into the Analysis

We now move on to the question of the social characteristics of members of our latent classes and in particular to that of how they may differ in their location within the stratification of contemporary English society. In technical terms, therefore, we introduce covariates into our latent class analysis of types of musical consumer.

We adopt the following strategy. First, we calculate, on the basis of our preferred latent class solution (Table 3), the conditional probability of respondents’ membership in each of our three latent classes, given their responses to the eight indicators.¹⁸ Thus, all respondents with a particular response pattern are assigned to the same latent class—that to which they have the highest, or modal, conditional probability of belonging. With our respondents then distributed among the three latent classes, we can go on to investigate the association between latent class membership and other variables of interest, whether through simple tabulation or through more powerful regression models, such as the multinomial logit. This procedure has had several effective sociological

Table 4 Distribution of types of musical consumers within social classes

Social class	U	OL	O
1. Higher managerial and professional occupations	52.3	27.1	20.7
2. Lower managerial and professional occupations	62.5	21.9	15.6
3. Intermediate occupations	74.9	16.9	8.2
4. Small employers and own-account workers	68.0	20.7	11.3
5. Lower supervisory and technical occupations	78.3	17.8	3.9
6. Semi-routine occupations	82.1	13.2	4.7
7. Routine occupations	81.0	15.6	3.3

applications—in, for example, the analysis of inter-generational exchanges (Hogan *et al.*, 1993) or, specifically in the field of cultural consumption, in a study of patterns of ‘high-brow’ and ‘low-brow’ reading (van Rees *et al.*, 1999).

Assigning individuals to modal latent classes inevitably introduces error into the data, no matter how high the modal probabilities might be, and the relative sizes of the latent classes after modal assignment can differ quite significantly from those estimated from the measurement model. However, in our present case, this is not a serious problem. Modal class assignment misclassifies 14 per cent of the respondents which is a quite modest level.¹⁹ Since measurement errors tend to attenuate the association between variables, the associations reported below can be regarded as *conservative estimates*.²⁰

The Distribution of Types of Musical Consumer by Social Class and Social Status

As noted earlier, we start from the position that in investigating the relationship between cultural consumption and social stratification, it is important conceptually to maintain the Weberian distinction between social class and social status; and in turn, we have the expectation that cultural consumption, as an aspect of lifestyle, will be the more closely associated with status than with class. It is then of interest to examine, before undertaking more elaborate multivariate analyses, how the types of musical consumer that we have identified are actually distributed by class and status.

In Table 4 we show results by class, following the seven-class version of the NS–SEC schema. It can be seen that within Classes 1 and 2, forming the salariat of primarily professional and managerial employees, there

Table 5 Distribution of types of musical consumers within status categories

Status categories ^a		Status score	U	OL	O	N
HP	Higher professionals	0.5643	52.3	18.8	28.9	128
APB	Associate professionals in business	0.5337	59.6	21.1	19.3	171
SM	Specialist managers	0.5107	53.3	27.5	19.2	182
TPE	Teachers and other professionals in education	0.5017	46.1	24.0	29.9	167
GMA	General managers and administrators	0.4114	57.9	26.3	15.8	76
API	Associate professionals in industry	0.3116	61.8	25.5	12.7	110
SET	Scientists, engineers and technologists	0.3115	51.5	30.9	17.7	136
FRC	Filing and record clerks	0.2559	69.6	19.6	10.7	56
OMO	Managers and officials, nec	0.2355	77.8	11.1	11.1	9
AOA	Administrative officers and assistants	0.2274	64.3	21.4	14.3	98
NCC	Numerical clerks and cashiers	0.2238	80.5	14.2	5.3	169
APH	Associate professionals in health and welfare	0.2228	67.1	17.1	15.8	152
SEC	Secretaries and receptionists	0.1539	70.1	19.1	10.8	157
OCW	Other clerical workers	0.1443	72.6	23.2	4.2	95
BSR	Buyers and sales representatives	0.1193	69.0	20.7	10.3	58
CCW	Childcare workers	0.1097	76.4	16.9	6.7	89
MPS	Managers and proprietors in services	-0.0453	62.9	23.5	13.5	170
PDM	Plant, depot and site managers	-0.0625	64.0	25.6	10.5	86
SW	Sales workers	-0.1151	82.1	14.1	3.8	262
HW	Health workers	-0.2121	78.7	14.6	6.7	164
PSW	Personal service workers	-0.2261	69.6	17.4	13.0	92
PSP	Protective service personnel	-0.2288	75.9	17.7	6.3	79
RWS	Routine workers in services	-0.2974	87.5	11.1	1.4	208
CW	Catering workers	-0.3261	70.6	22.1	7.4	68
SDC	Store and despatch clerks	-0.3353	76.0	24.0	0.0	25
SMO	Skilled and related manual workers nec	-0.4072	72.5	20.3	7.3	138
TO	Transport operatives	-0.4114	71.6	25.7	2.8	109
SMC	Skilled and related manual workers in construction and maintenance	-0.5014	80.2	16.4	3.5	116
SMM	Skilled and related manual workers in metal trades	-0.5121	76.0	21.5	2.5	121
PMO	Plant and machine operatives	-0.5589	87.9	10.1	1.9	207
GL	General labourers	-0.5979	88.4	8.3	3.3	121
Overall			70.4	19.1	10.4	3819

Note: ^aFor examples of occupations within each category and other details, see Chan and Goldthorpe (2004, Table 2).

is the smallest representation of univores, our most limited type of musical consumer, and the largest representation of omnivore-listeners and true omnivores. The reverse is then generally the case within Classes 5, 6, and 7, making up the working class of lower supervisory and manual wage-earners, while within classes 3 and 4, those of routine nonmanual workers, and of small employers and self-employed workers respectively, an intermediate situation obtains, though there are more Us and fewer OLs and Os in class 3 than in class 4. However, it should further be noted from Table 4 that univores are the most frequently, and omnivores the least frequently occurring type *within each class alike*.

Table 5 then reports the corresponding distribution by status—i.e. by the 31 categories of our status scale (Chan and Goldthorpe, 2004), and Figure 1 presents essentially the same information in graphical form, with membership in each of our three latent classes being plotted against status score (though note the differing scales on the vertical axes). We also add a non-parametric regression line to each plot (Cleveland, 1979). Figure 1 shows that the probability of being a univore is negatively related to status in a fairly linear fashion while the probability of being a true musical omnivore is positively related, with the slope being somewhat steeper at the high end of the status hierarchy. The probability of being a omnivore-listener also seems positively related to status,

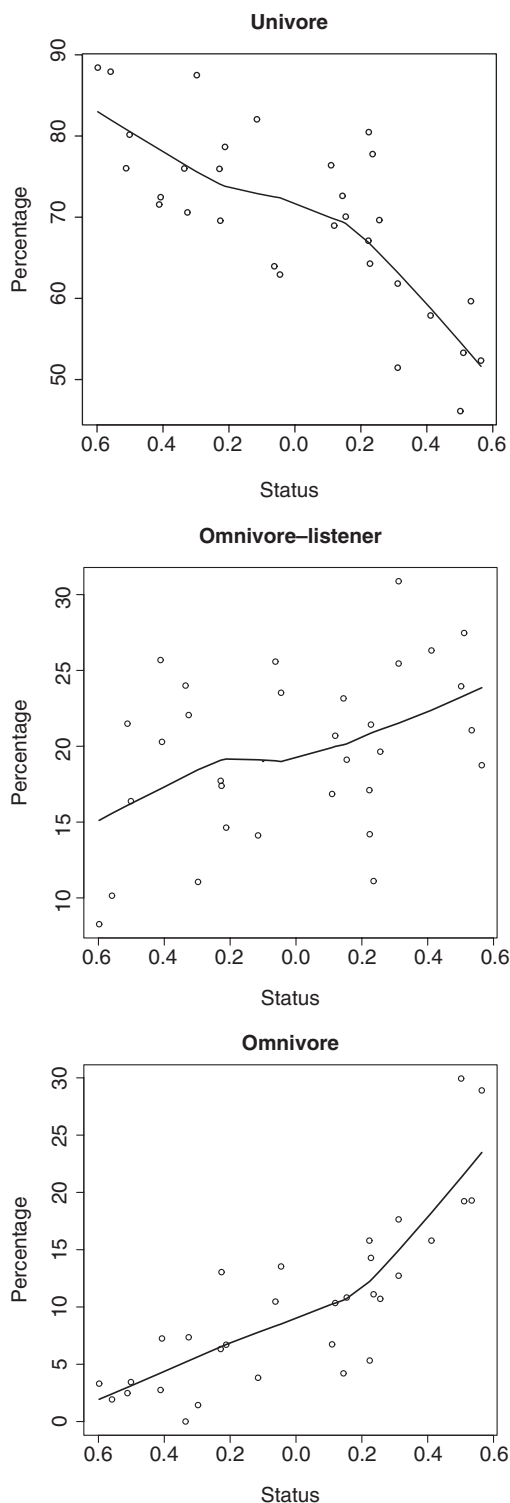


Figure 1 Type of musical consumer by social status

even though the wider dispersion of points around the regression line indicates that in these cases the association is weaker than with true omnivores. From Table 5 it can further be seen that within four of the seven highest ranking groups, Higher professionals, Specialist managers, Teachers and other professionals in education, and Scientists, engineers and technologists, omnivores and omnivore-listeners together achieve approximately equal representation with univores—i.e. are strongly over-represented in relation to their numbers in our total sample.

Thus, status effects on type of musical consumption would, on this basis, appear somewhat clearer than class effects. However, to provide a serious test of our claim that in the social stratification of musical or other forms of cultural consumption, it is status rather than class that will be of greater relevance, we need to move on to multivariate analyses.

The Social Characteristics of Types of Musical Consumer: Multivariate Analysis

Descriptive statistics of the covariates that are included in our multivariate analyses are given in Table 6. These covariates are of two main kinds. First, there are ones that could be described as broadly demographic, and that we introduce primarily as controls. It could be expected that musical consumption will be influenced by demographic factors, operating essentially as constraints. For example, women with young children living in the far North might be thought less likely at least to attend musical events than single men living in London. For our present purposes, we wish to abstract from effects of this kind on the chances of individuals being found in one or another of our latent classes. Secondly, there are covariates relating to social stratification on which our attention focuses, and it is these that serve as our explanatory variables of interest. Here, in addition to the measures of class and status to which we have already referred, we include measures of individuals' income and educational qualifications so that the separate effects of all these variables can be assessed. We use a multinomial logit model with membership in our three latent classes as the dependent variable, and take univores as our reference category. Results are reported in Table 7.²¹

It can be seen, to begin with, that the demographic variables that we include in the model have significant effects in a rather patchy and sometimes only marginal fashion. Women are clearly less likely than men to be OLs rather than Us, but are more likely to be Os rather than OLs: i.e. the OLs have a rather masculine bias. Younger people are clearly more likely than

Table 6 Descriptive statistics of covariates

	<i>N</i>	%			
Female ^a	2110	55.3			
Single (reference category)	700	18.3			
Married or cohabiting	2473	64.8			
Separated, divorced, or widowed	646	16.9			
Children 0–4 ^b	651	17.1			
Children 5–10 ^b	779	20.4			
Children 11–15 ^b	623	16.3			
London (reference category)	493	12.9			
The North	1141	29.9			
Midlands and East Anglia	1150	30.1			
South East	617	16.2			
South West	418	11.0			
No qualifications (reference category)	865	22.7			
CSE, etc.	508	13.3			
O-levels	889	23.3			
A-levels	518	13.6			
Post-secondary qualifications	347	9.1			
Degree	692	18.1			
Class 1—higher managerial and professional occupations (reference category)	488	12.8			
Class 2—lower managerial and professional occupations	1023	26.8			
Class 3—intermediate occupations	574	15.0			
Class 4—small employers and own-account workers	275	7.2			
Class 5—lower supervisory and technical occupations	359	9.4			
Class 6—semi-routine occupations	620	16.2			
Class 7—routine occupations	480	12.6			
	Mean	S.D.	Minimum	Maximum	
Age	42.1	11.8	20	64	
Annual income ^c	15,573	10,863	260	37,700	
Status	−0.001	0.365	−0.598	0.564	

Note: ^aMale is reference category.

^bNot having children in the respective age ranges are the reference categories.

^cThe income variable in the Arts in England data set is originally coded in terms of 32 income brackets of variable width. In our analysis, we have assigned respondents to the midpoint of the income bracket to which they belong.

older people to be Us rather than OLs or Os and, among the omnivores, older people are more likely to be Os rather than OLs. Married people appear less likely, as compared with singles, to be OLs rather than Us, and the presence of older children appears to reduce the chances of individuals being Os or OLs rather than Us. Finally, region has an effect in

that living in the North or Midlands rather than in London reduces the chances of being an OL or O rather than a U.²²

Turning next to our main concern with the social stratification of musical consumption, one result is immediately apparent from Table 7. We can confirm our hypothesis that status is in this regard of greater importance than is class. In the context of our multivariate model, the effects of class are non-significant, while status has a significant effect in the contrasts between O and U and between O and OL. In other words, the higher an individual's status, the more likely they are to be a true omnivore rather than a univore, and a true omnivore rather than a omnivore–listener.²³ It might be argued, especially by those who favour a one-dimensional understanding of social stratification and reject the utility of the class/status distinction, that all that is being shown here is that our measure of status better captures this one dimension than does our measure of class. However, other results that we have recently reported would undermine this view and are in fact much as would be expected from a Weberian standpoint. For example, using the same measures as in the present article, we find (Chan and Goldthorpe, 2006) that class has a clearly stronger influence than does status on individuals' economic life chances, such as their risks of experiencing long-term or recurrent unemployment or their earning prospects, and also on their political partisanship—at least in terms of Labour or Conservative voting—in recent British elections.²⁴

As regards the other stratification variables included in our model, we may note first of all that the effect of income turns out to be non-significant. In marked contrast, the effects of educational qualifications are obviously important, and follow a pattern broadly similar to those of status. The higher an individual's educational level, the more likely they are to be an O or OL rather than a U, and more likely to be an O than an OL. However, the important question then arises of whether, once status and other stratification variables are controlled, the effects of education *per se* are in fact best understood in terms of stratification. We would ourselves take the view that they are more plausibly seen as operating, at least in some large part, through individual psychology according to the information-processing hypothesis to which we have previously referred: i.e. the hypothesis that the higher an individual's information-processing capacity (as indexed in our case by educational attainment), the more complex must be the informational stimuli of any form of cultural participation in which they

Table 7 Multinomial logit model: type of musical consumer as dependent variable

	OL vs U		O vs U		O vs OL	
	$\hat{\beta}$	s.e.	$\hat{\beta}$	s.e.	$\hat{\beta}$	s.e.
Female	-0.272**	(0.104)	0.156	(0.137)	0.428**	(0.150)
Married	-0.265*	(0.131)	-0.321	(0.176)	-0.056	(0.194)
Separated	0.098	(0.157)	-0.065	(0.214)	-0.163	(0.232)
Age	0.042**	(0.005)	0.066**	(0.006)	0.024**	(0.007)
Child (0–4)	-0.077	(0.139)	-0.391	(0.214)	-0.314	(0.235)
Child (5–10)	-0.101	(0.125)	-0.340	(0.188)	-0.239	(0.208)
Child (11–15)	-0.259*	(0.131)	-0.397*	(0.191)	-0.138	(0.212)
The North	-0.453**	(0.144)	-0.470*	(0.193)	-0.017	(0.211)
Midlands	-0.314*	(0.142)	-0.198	(0.184)	0.117	(0.202)
South East	-0.017	(0.154)	0.060	(0.198)	0.077	(0.215)
South West	-0.036	(0.172)	-0.224	(0.238)	-0.188	(0.256)
Income	0.005	(0.005)	0.012	(0.007)	0.007	(0.007)
CSE/others	0.578**	(0.162)	1.006**	(0.276)	0.428	(0.299)
O-levels	0.572**	(0.146)	1.109**	(0.242)	0.537*	(0.263)
A-levels	0.740**	(0.171)	1.523**	(0.265)	0.783**	(0.288)
Sub-degree	0.821**	(0.188)	1.851**	(0.266)	1.030**	(0.292)
Degree	1.028**	(0.177)	2.367**	(0.256)	1.339**	(0.278)
Class 2	-0.181	(0.148)	-0.135	(0.172)	0.047	(0.188)
Class 3	-0.325	(0.194)	-0.329	(0.247)	-0.004	(0.273)
Class 4	-0.106	(0.236)	0.299	(0.291)	0.404	(0.321)
Class 5	-0.160	(0.252)	-0.253	(0.382)	-0.094	(0.413)
Class 6	-0.339	(0.234)	-0.107	(0.317)	0.232	(0.350)
Class 7	-0.133	(0.257)	-0.109	(0.387)	0.024	(0.420)
Status	0.345	(0.211)	1.047**	(0.287)	0.702*	(0.315)
Constant	-2.979**	(0.342)	-5.906**	(0.472)	-2.927**	(0.515)

Note: * $P < 0.05$; ** $P < 0.01$.

engage if pleasure and fulfilment are to derive from it (see note 6).

Finally, in this section, we turn to the issue of the substantive strengths of the effects of status and educational attainment, the two variables that show up as clearly most important in regard to musical consumption. To this end, we report in Table 8 some predicted probabilities from our multinomial logit model of the latent class membership of a hypothetical person—we take a 40-year old childless woman living in London—whose education and status we vary at three income levels.²⁵

The effects of educational qualifications are described in Panel A of Table 8. The pattern that generally emerges is most clearly brought out in the central lines of the panel (lines 3–5) where we hold income constant at £25,000 and status constant at the level of Managers and proprietors in services. It can then be seen that the probability of our hypothetical woman being a univore is very sensitive to the level of her educational qualifications—declining by about 33 percentage points as between ‘none’ and ‘degree’; and,

further, that most of the compensating change relates to her chances of being a true omnivore. A range of results on this pattern is shown graphically in the plots of Figure 2 in which the strength of the effects of education is indicated by the vertical distance between the lines. This distance is greatest in the plots for membership in U and O, and in the latter case, especially at the high end of the status order.

The effects of status are illustrated in Panel B of Table 8. To begin with, it is apparent that in all scenarios the chances of our hypothetical woman being a univore decline with the status we attribute to her—in fact by about 13 percentage points across virtually the full status range (lines 10–12) when we suppose that she has an annual income of £25,000 and O-level qualifications. Again, the larger compensating change is in the probabilities of our hypothetical woman being a true omnivore. This effect is also revealed in Figure 2, especially by the slopes of the lines for those with a university degree.

In sum, one could then say, education appears to have a somewhat stronger effect than status on which

Table 8 Examples of predicted probabilities of type of musical consumer^a

	Income ^b	Education	Occupation ^c	U	OL	O
A: Effects of education, controlling for status, and income						
1	15	None	PMO	0.860	0.119	0.021
2	15	O-levels	PMO	0.762	0.184	0.054
3	25	None	MPS	0.824	0.135	0.042
4	25	O-levels	MPS	0.705	0.196	0.099
5	25	Degree	MPS	0.495	0.221	0.284
6	35	O-levels	HP	0.599	0.216	0.185
7	35	Degree	HP	0.353	0.204	0.443
B: Effects of status, controlling for education, and income						
8	15	None	PMO	0.865	0.113	0.022
9	15	None	MPS	0.829	0.138	0.033
10	25	O-levels	PMO	0.747	0.193	0.060
11	25	O-levels	MPS	0.693	0.214	0.093
12	25	O-levels	HP	0.614	0.235	0.150
13	35	Degree	MPS	0.477	0.257	0.266
14	35	Degree	HP	0.372	0.249	0.380

Note: ^aOther covariates fixed as follows: 40-years old female Londoner with no children.

^bAnnual income (in thousand of pounds).

^cPMO: Plant and machine operatives, MPS: Managers and proprietors in services, HP: Higher professionals.

type of musical consumer an individual is likely to be, but some, positive, interaction between these two variables seems also to occur.²⁶

Conclusion

We have already noted some of the immediate implications of our latent class analysis for the three arguments on social stratification and cultural taste and consumption from which we started. We now consider what further can be said in the light of our examination of the social characteristics of our three types of musical consumer.

As regards the homology argument, we previously observed that this appears to be undermined by the fact that although we can identify a potential ‘mass’ of musical consumers, that is, our univores, our latent class analysis does not reveal a musical ‘elite’ who clearly reject more popular musical forms. Our subsequent analyses then show that, as the homology argument would require, our univores do indeed predominate at the lower levels of the stratification of contemporary English society, in whatever way this may be conceptualized. Thus, as can be seen from Tables 4 and 5, univores constitute a substantial majority—around 80 per cent—of the broadly defined working class (NS Classes 5, 6, and 7) and likewise of the categories in the lower half of our status scale. However, what has then further to be recognized is that univores are by no means minoritarian at *higher*

levels of stratification. In fact, they make up a majority of the professional and managerial salariat (NS Classes 1 and 2) and also of most of the highest-ranking categories in the status scale. In other words, the homology argument breaks down not only in that we fail to find a musical elite that confines its consumption to ‘higher’ musical forms, but further in that these forms appear to have little appeal for many in higher class and status positions, who, in fact, follow the most frequent pattern in the population at large in restricting their consumption largely to popular music.

These same findings would also appear highly damaging to Bourdieu’s elaboration of the homology argument. Since we cannot identify a musical elite, then neither *a fortiori* can we identify anything recognizable as Bourdieu’s ‘dominant class’ that seeks both to define and appropriate high culture—and even when we focus on music, Bourdieu’s ‘infallible classifier’.²⁷ Moreover, the results we report sustain the view we previously expressed that there is little to be said for Bourdieu’s attempt to go beyond Weber and to ‘yoke together’ class and status: i.e. by treating status and associated lifestyles as the symbolic aspect of the class structure and as reflecting the distinctive forms of *habitus* created by different ‘class conditions’. We have shown elsewhere (Chan and Goldthorpe, 2004) that in contemporary British society, the class structure and the status order, at least as we would wish to conceptualize them, do not map all that closely onto each other. And in this article, we further show

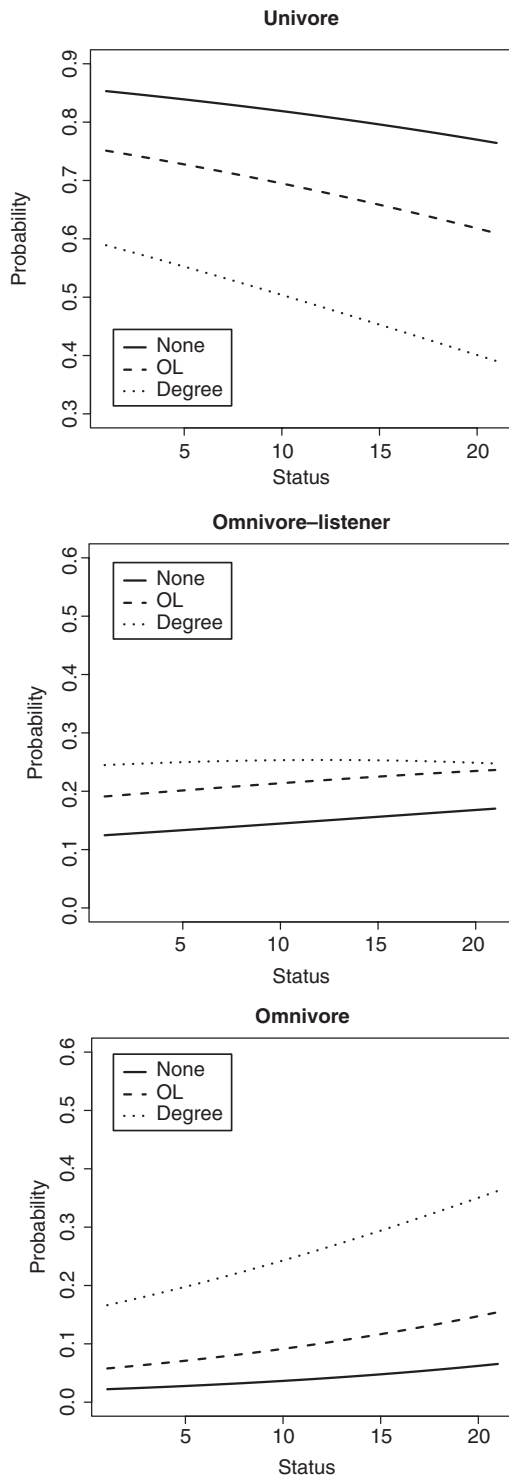


Figure 2 Predicted probabilities of type of musical consumer by education and social status

that, when class and status are entered into the analysis together, class turns out to have rather little connection with musical consumption while the significance of status persists. Thus, in so far as we can identify musical elites at all, not in the sense of the homology argument but rather as omnivores who consume higher musical forms along with more popular ones, status—and education—do far more to account for membership in these groupings than does class. At the same time, though, it should be apparent from what has already been said that the effects of status on type of musical consumption, while highly significant, are not overwhelmingly *strong*. And thus the idea of such consumption being more or less compulsively determined by the *habitus* of the individual's status group—or class—would appear, at all events in the case we have considered, to be quite misleading.²⁸

As regards the individualization argument, we have already remarked that the outcome of our latent class analysis—i.e. the very fact that we can identify a limited number of rather well-defined types of musical consumer—at once raises serious doubts, at least if the argument goes so far as to imply that all patterns of consumption, cultural and otherwise, are tending to dissolve into an infinity of individual styles. And, further to this, we can now say on the basis of our regression analysis that the probabilities of individuals approximating one rather than another type of musical consumption are, indeed, associated in fairly clear, even if not always straightforwardly 'homologous', ways with their position in the status order and with educational attainment. On the one hand, the probability of being a univore declines steadily as level of status and also of education increase. On the other hand, the probability of being an omnivore-listener and especially that of being a true omnivore are positively related to status and education.

Although, then, musical consumption will no doubt in some degree reflect purely individual taste and possibly, too, conscious lifestyle choice, especially within the broad genres that we have distinguished, there can be little doubt that it does still remain in various ways socially stratified.²⁹ Whether this stratification is less or more marked than at some earlier period, we are, at least for the time being, unable to say. But, so far as the present is concerned, our findings would indicate that for analysts of cultural consumption, simply to change their emphasis 'from *habitus* to freedom' is in fact to move from one empirically untenable extreme to the other.

Finally, as regards the omnivore-univore argument, we earlier suggested that it is this that would appear most consonant with the results of our latent class

analysis—sufficiently so, at least, to justify labelling our three types of musical consumer in omnivore–univore terms. To this we can now add that results from our regression analysis are also broadly in line with omnivore–univore expectations. As described earlier, omnivores tend to be of higher status and also to have higher levels of education than univores. At the same time, though, certain qualifications to the omnivore–univore argument that we previously put forward are also underlined. In particular, the importance of the distinction between omnivore–listeners and true omnivores is borne out in that this distinction, too, is found to have a grounding in differences in status and education.³⁰

We further noted that the omnivore–univore argument, while apparently representing a ‘middle way’ between the homology and individualization arguments, can in differing versions have more affinity with the one or the other: that is, depending on whether omnivorousness is taken to express a new aesthetic—perhaps less inclusive than it may at first appear—that is itself exploited in status competition or simply an attempt at self-realization that is little constrained by conventional ideas of cultural levels. We would not at this stage, before having extended our analyses to other cultural domains than that of music, wish to take up any very strong position on which slant has most to commend it. But, so far as our present findings go, they incline us to favour the ‘self-realization’ rather than the ‘status competition’ view. Our data are not sufficiently detailed to allow us to say whether our musical omnivores do, in fact, ‘draw a line’ at certain kinds of popular music, but we do find (Table 3) that omnivorousness can be qualified by an apparent dislike of kinds of music, such as opera or jazz, that do not have low status associations.

More generally, in fact, we would believe that a rather radical rethinking is now required of the nature of status relations in modern societies, and likewise of the part played by differences in cultural consumption in these relations. We would ally ourselves with proponents of the omnivore–univore argument who claim that, whatever validity the ideas of symbolic ‘struggle’ and ‘violence’, as advanced by Bourdieu and his followers, may have had for the earlier history of modern societies, they appear out of place the contemporary world. However, new ideas are then needed. Thus, while in the case of present-day Britain, a status order can still be discerned (Chan and Goldthorpe, 2004), it would appear to be less sharply demarcated than previously; and there is other evidence to indicate that status differences are now less openly asserted from above or deferentially

acknowledged from below. In turn, therefore, it could also be that the connection between status and cultural consumption is itself tending to weaken, and even on omnivore–univore lines, although, to repeat, data adequate to test this possibility are not yet available. At all events, it may have to be recognized that while both collective attempts at the hierarchical differentiation of lifestyles and individual striving for ranking within the hierarchies thus formed may still be pervasive, status enhancement may now be pursued through far more varied and less direct and overt means than previously, and may indeed no longer always imply an essentially ‘zero-sum’ game: that is, one in which exclusion is as important as acceptance or in which, in Gore Vidal’s memorable phrase, ‘it is not enough to succeed; others must fail’.

Notes

1. We claim no originality in defining the current situation on these lines. See also, for example, Warde *et al.* (2000) and Sintas and Álvarez (2002).
2. We rely a good deal on the illuminating exposition of Bourdieu on ‘social class and symbolic violence’ in Weinger (2005), and cf. also Jenkins (2002, ch. 6 esp).
3. The one way in which, so far as we can see, Bourdieu might allow for the possibility of a discrepancy between status and class—of the kind to which Weber frequently refers—is where, within what he deems to be the same class, Bourdieu acknowledges that differences in the relative importance of cultural as opposed to economic capital lead to some ‘class fractions’ having lifestyles of greater ‘distinction’ than others. For example, within the dominant class, academics and ‘artistic producers’ appear in this sense to be recognized as having superior status to industrial and commercial employers, with professionals falling somewhere in-between. However, if this interpretation of Bourdieu is accepted, it would then represent a much more substantial concession to the Weberian position than Bourdieu seems ready to acknowledge.
4. For example, the survey on which the analyses in Bourdieu (1984) are chiefly based contains very little information on cultural consumption as opposed to taste. And no consideration is given to the reliability of inferring the former from the latter.
5. These variables tend of course to be correlated with each other. But the correlation is seldom so

high as to preclude their simultaneous inclusion in a multivariate model so that their net effects can be assessed.

6. The argument here is that the higher individuals' information processing capacity, the greater must be the information content of the cultural forms in which they participate if they are to derive satisfaction from them. Thus, the association between 'high' culture and educational attainment is due to the facts (a) that 'high' culture has, on average, a higher level of information content than 'low' culture and (b) that education is crucially involved in, and is thus a good proxy for, the information processing capacity of individuals. For further discussion of the information processing hypothesis, see Chan and Goldthorpe (forthcoming).
7. At an empirical level, we would thus wish to question whether Bourdieu's notion of class *habitus* as the source of a close correspondence between 'class conditions', on the one hand, and lifestyle, including cultural consumption, on the other, is in fact capable of being seriously upheld. See further below.
8. The survey also contains information on attendance at (i) musicals, (ii) folk or country and western concerts, or (iii) other music events. These items are not used for the following reasons. Attendance at musicals is considered in a separate analysis of theatre-going (Chan and Goldthorpe, 2005). We have repeated the analysis of the present article with this item included, and the results are substantively the same as those reported subsequently. Details are available from the authors on request. Attendance at folk or country and western concerts is not used because this was reported by only three per cent of respondents, and preliminary analysis suggested that this item was not discriminatory between the latent classes of musical consumption that we distinguish (see subsequent text). Finally, attendance at 'other' music events is discounted as too imprecise in character to be relevant to our concerns.
9. This scale is based on an analysis of the occupational structure of close friendships (cf. Laumann, 1966).
10. No confusion will, we trust, arise as between the 'classes' (i.e. categories) of our latent class analyses and 'classes' in the sociological sense.
11. Thus, if there are three observed categorical variables A , B , C with I , J and K categories,

respectively, a latent class model with T classes can be expressed as follows:

$$\pi_{ijk}^{ABC} = \sum_{t=1}^T \pi_t^X \pi_{it}^{A|X} \pi_{jt}^{B|X} \pi_{kt}^{C|X},$$

where π_t^X is the probability that a person belongs to latent class t , $\pi_{it}^{A|X}$ is the probability that this person is found at level i of A given membership in latent class t , and so on. We fit our latent class models with Latent GOLD 3.0 (Vermunt and Magidson, 2003).

12. Local dependencies are introduced by adding *direct effects* between the relevant indicators. Using the notation of note 11, if indicators B and C are thought to be locally dependent on each other, the latent class model would be modified as follows:

$$\pi_{ijk}^{ABC} = \sum_{t=1}^T \pi_t^X \pi_{it}^{A|X} \pi_{jkt}^{BC|X},$$

where the BC association is constrained to be the same across all latent classes. For details, see Hagenaars (1988); Magidson and Vermunt (2004).

13. Without the four parameters of local dependence, we need to postulate six latent classes before a satisfactory fit can be achieved. Details are available on request.
14. As we have noted in the text, the binary responses to the eight questions on musical consumption with which we work can be regarded as forming an eight-way contingency table. If our respondents were to have been distributed randomly over the cells of this table, then we would have been able to do no more than identify just one latent class—to which everyone belonged.
15. Even if we were to accept the model postulating four latent classes in Table 2, we would still not be able to discern a group which consumes high-brow music only. Under the 4-class model, latent class 2 of the 3-class model would be split into two subgroups, with one being slightly more likely to attend pop and jazz concerts than the other. Details are available on request.
16. If musical elites are defined as those who would consume opera, classical music, and jazz, either live *or* through any media, while at the same time not consuming pop at all, then only 36 respondents, or 0.85 per cent of our sample, fall into this category. And even taking a more inclusive definition of the musical elite by leaving jazz out of account, still only 2.8 per cent of the sample would be covered. A colleague

thoughtfully suggested that our failure to identify a musical elite is, perhaps, because we have used a very broad definition of music-listening. He suggested that musical elites might casually listen to pop music on the radio, but they would never put on a record or a CD of pop music. We have repeated our latent class analysis with a narrower definition of media consumption of music, counting CD, mini disc, tape or record only, and the results obtained are very similar to those reported here, except that two further local dependence terms are needed to account for weaker associations between jazz and pop. Details are available from the authors on request.

17. It might be argued that the results of our latent class analysis could be misleading in that the four musical genres distinguished in the Arts in England survey are all very broad and heterogeneous, especially that of pop/rock; with more refined categories, quite different patterns of musical consumption could show up. To address this issue, we have analysed relevant UK data from the Eurobarometer survey of August–September, 2001. Despite its wider coverage, this data set is much smaller than that we have used for England ($N=1,346$) but it includes questions on listening, live and via media, to classical music, opera, jazz, and to eight different types of pop/rock music. When we derive from this data set essentially the same indicators of musical consumption as used in the analyses reported above—i.e. by collapsing the different types of pop/rock—and apply the same latent class models, we obtain very similar results as with the Arts in England data. When we then carry out latent class analyses in the case of all respondents who listen to pop/rock and exploit the eight different types distinguished, we find five quite distinctive latent classes of pop/rock consumer, including one of pop/rock omnivores. We would then conclude that while the genres used in our main analyses are rather crude, they are unlikely to give an unduly distorted picture of musical consumption. Such consumption, we would suggest, tends to have a ‘fractal’ structure in that similar patterns recur at different levels of detail.
18. Thus, suppose there are three observed categorical variables A , B , and C , the conditional probability that someone belongs to latent class t given that this person is at level i of A , level j of B ,

and level k of C is given by the following expression:

$$\pi_{ijk}^{X|ABC} = \frac{\pi_i^X \pi_{it}^{A|X} \pi_{jt}^{B|X} \pi_{kt}^{C|X}}{\sum_{t=1}^T \pi_i^X \pi_{it}^{A|X} \pi_{jt}^{B|X} \pi_{kt}^{C|X}}.$$

19. Post-assignment, the relative sizes of the latent classes are 70.4, 19.1, and 10.4 per cent, respectively, as compared with 65.7, 24.0, and 10.3 per cent in the measurement model (cf. Table 3). The percentage of cases misclassified is calculated as: $100 \times \sum_j [(1 - \hat{\pi}_j) \cdot \frac{n_j}{N}]$, where n_j is the number of respondents giving response pattern j , $\hat{\pi}_j$ is the estimated modal latent class probability given response pattern j , and N is the total sample size. Note that the percentage of cases misclassified by latent class models is different from the index of dissimilarity (Δ) that is commonly used in loglinear analysis. While Δ measures the discrepancy between the fitted and observed frequencies of a contingency table, in latent class models there is, by definition, no observed value of latent class membership. Thus, in latent class analysis the percentage of cases misclassified should be understood in terms of measurement error. In the extreme, to have zero per cent of cases misclassified would mean that univores will *always* do X but *never* Y or Z . . . and omnivores will *always* do X , Y , Z , . . . This is clearly unrealistic, as various random factors, such as a spell of ill health, might intervene and prevent even the truest omnivore to go to any music event for a specific period. Furthermore, although the model which assumes just one latent class rarely, if ever, fits the data, it also, by definition, *never* misclassifies any case through the modal latent class assignment procedure. Thus, the percentage of cases misclassified should not be used as a criterion of model selection.
20. An alternative and more sophisticated way to incorporate covariates has been proposed. In this case, the latent class measurement model is combined directly with a regression model (Yamaguchi, 2000; Bandeen-Roche *et al.*, 1997; Dayton and Macready, 1988; Formann, 1992), and in this way the probabilistic nature of the former is preserved. This approach accepts in effect that we can never know for certain that an individual belongs to one latent class rather than another, and is in this regard preferable. However, our experience is that the measurement part of the model can become unstable once more than a quite limited number of covariates

are added. Details are available from the authors on request.

21. The multinomial logit model, fitted with R (R Development Core Team, 2005), can be represented as follows:

$$\log\left(\frac{P_k}{P_U}\right) = \mathbf{x}'\beta, \quad k = \text{OL}, \text{O}$$

where P_U is the probability of being a univore, P_k is the probability of belonging to the latent class k , x is a vector of covariates, and β is the vector of parameters to be estimated. We also report in Table 7 a column showing results with OL serving as the reference category. This is just a different parameterization of the same model.

22. The size of the town in which one lives might have greater sociological relevance than region. Unfortunately, there is no such measure in the data set.
23. In analyses not reported here, we have included quadratic terms for status and also age in the model. But these terms turn out to be insignificant. Details are available from the authors on request.
24. It might further be argued that because we use six parameters to capture the effect of class but only one parameter to represent status, the latter is much more likely than the former to be found statistically significant. In this way, we might be privileging the Weberian position that we favour. We have repeated our analysis with a five-fold version of the class schema and with a fourfold division of the status hierarchy (see Chan and Goldthorpe, 2004). Essentially the same results are obtained as those reported in the text except that the effect of status does now become significant in the contrast between omnivore–listeners and univores. Details are available from the authors on request.
25. These probabilities are estimated under a model that is very similar to the one reported in Table 7, but with the insignificant terms of class and marital status being dropped.
26. There are no interaction terms in our multinomial logit model but, while the model is linear in the logit, it is *not* linear in probability.
27. A dominant class of the kind Bourdieu describes would surely be large enough, if it existed, to be picked up in our latent class analysis—i.e. would amount to at least a few per cent of the total population. An attempt to ‘save’ the homology argument in some form could, perhaps, be made by postulating a musical or more general cultural

elite that is much smaller than this and in fact too small to figure in any survey-based analysis. But it would need to be explained how the argument then applied to the rest—i.e. virtually the whole—of the population. It is, of course, possible that Bourdieu’s views were more apt to France, or at least to Paris, in the 1960s when, in fact, the empirical research on which he relies was carried out. Unfortunately, the data collected do not appear to be available for reanalysis.

28. In fact, much the same conclusion has recently been reached in a study of musical tastes in contemporary France of a generally far higher technical quality than that of Bourdieu: ‘Si l’analyse sur les données françaises confirme la robustesse du lien entre les caractéristiques sociales et l’orientation des préférences musicales des individus, celui-ci apparaît sensiblement moins consistant que ne le suggère la théorie de l’*habitus*’ (Coulangeon, 2003, pp. 28–9).
29. To link the individualization argument with that of the decay or ‘death’ of class, as some authors have done, would then seem rather beside the point: status is the form of stratification that the argument needs chiefly to address to make good the claim that lifestyles have broken free of all structural grounding.
30. We are grateful to an anonymous reviewer who alerts us to some ongoing methodological research that suggests that the two-step approach that we adopt in this article might lead to conservative estimates of parameters. But we are probably not conservative in terms of statistical significance of parameters, since there is likely to be an even greater downward bias of the standard errors (Bolck *et al.*, 2004). It is beyond the scope of this article to investigate this methodological development. However, these results, if true, should not threaten the main substantive conclusions of this article. That is, the strong education and status effects that we report might be even stronger, while the non-significance of the income and class effects should remain so.

Acknowledgements

We are grateful to Arts Council England, especially Adrienne Skelton and Ann Bridgwood, for access to the detailed occupational codes of the Arts in England data set. The views expressed in this article are entirely our own, and not necessarily those of Arts

Council England. For helpful comments and statistical advice, we thank Koen van Eijck, Duncan Gallie, Peter Hedström, Matthijs Kalmijn, Ruud Luijkx, Kenneth Macdonald, Kees van Rees, Yossi Shavit, Frank Trentmann, Jeroen Vermunt, anonymous reviewers, and seminar audiences in Birmingham, Bloomington, Ithaca, London, Oxford, Tilburg, and the Spring 2004 meeting of the ISA Research Committee 28 on Social Stratification and Mobility in Neuchâtel and the 2005 ASA meeting in Philadelphia. A substantial part of the analysis of this article was carried out using the free software R. We are grateful to the many contributors to R for making their wonderful program available to us, and others, for free. Our research is supported by a ESRC/AHRC research grant under their Cultures of Consumption Research Programme Phase II, award number: RES-154-25-0006.

References

- Bandeau-Roche, K., Miglioretti, D. L., Zeger, S. L. and Rathouz, P. J. (1997). Latent Variable Regression for Multiple Discrete Outcomes. *Journal of the American Statistical Association*, **92**, 1375–1386.
- Bauman, Z. (1988). *Freedom*. Milton Keynes: Open University Press.
- Bauman, Z. (2002). *Society Under Siege*. Cambridge: Polity Press.
- Beck, U. (1992). *Risk Society: Towards a New Modernity*. London: Sage.
- Berlyne, D. (Ed.) (1974). *Studies in the New Experimental Aesthetics: Steps Toward an Objective Psychology of Aesthetic Appreciation*. Washington: Hemisphere.
- Bolck, A., Croon, M. and Hagenaars, J. (2004). Estimating Latent Structure Models with Categorical Variables: One-step Versus Three-steps Estimators. *Political Analysis*, **12**, 3–27.
- Bourdieu, P. (1984). *Distinction: A Social Critique of the Judgement of Taste*. London: Routledge & Kegan Paul.
- Bryson, B. (1996). Anything but Heavy Metal: Symbolic Exclusion and Musical Dislikes. *American Sociological Review*, **61**, 884–899.
- Bryson, B. (1997). What about the Univores? Musical Dislikes and Group-based Identity Construction Among Americans with Low Level of Education. *Poetics*, **25**, 141–156.
- Chan, T. W. and Goldthorpe, J. H. (2004). Is there a Status Order in Contemporary British Society? Evidence from the Occupational Structure of Friendship. *European Sociological Review*, **20**, 383–401.
- Chan, T. W. and Goldthorpe, J. H. (2005). The Social Stratification of Theatre, Dance and Cinema Attendance. *Cultural Trends*, **14**, 193–212.
- Chan, T. W. and Goldthorpe, J. H. (2006). *Class and Status: The Conceptual Distinction and its Empirical Relevance*. Sociology Working Papers 2006–03, Department of Sociology, University of Oxford.
- Chan, T. W. and Goldthorpe, J. H. (forthcoming). Social Status and Newspaper Readership. *American Journal of Sociology*.
- Cleveland, W. S. (1979). Robust Locally Weighted Regression and Smoothing Scatterplots. *Journal of the American Statistical Association*, **74**, 829–836.
- Coulangeon, P. (2003). La stratification sociale des goûts musicaux. *Revue française de sociologie*, **44**, 3–33.
- Dayton, C. M. and Macready, G. B. (1988). Concomitant-variable Latent Class Models. *Journal of the American Statistical Association*, **83**, 173–178.
- Formann, A. K. (1992). Linear Logistic Latent Class Analysis for Polytomous Data. *Journal of the American Statistical Association*, **87**, 476–486.
- Gans, H. J. (1999). *Popular Culture and High Culture: An Analysis and Evaluation of Taste*. New York: Basic Books revised edition.
- Ganzeboom, H. B. (1982). Explaining Differential Participation in High-Cultural Activities: A confrontation of Information-processing and Status-seeking Theories. In Raub, W. (Ed.), *Theoretical Models and Empirical Analyses: Contributions to the Explanation of Individual Actions and Collective Phenomena* Utrecht: E.S.-Publications, pp. 186–205.
- Giddens, A. (1991). *Modernity and Self-identity: Self and Society in the Late Modern Age*. Cambridge: Polity.
- Hagenaars, J. A. (1988). Latent Structure Models with Direct Effects Between Indicators: Local Dependence Models. *Sociological Methodds and Research*, **16**, 379–405.
- Hogan, D. P., Eggebeen, D. J. and Clogg, C. C. (1993). The Structure of Intergenerational Exchanges in American Families. *American Journal of Sociology*, **98**, 1428–1458.
- Jenkins, R. (2002). *Pierre Bourdieu*. London: Routledge revised edition.
- Laumann, E. O. (1966). *Prestige and Association in an Urban Community*. Indianapolis: Bobbs-Merrill.
- Magidson, J. and Vermunt, J. K. (2004). Latent Class Models. In Kaplan, D. (Ed.), *The Sage Handbook of Quantitative Methodology for the Social Sciences*, chapter 10, Thousand Oaks, CA: Sage pp. 175–198.

- McCutcheon, A. L. (1987). *Latent Class Analysis, volume 64 of Quantitative Applications in the Social Sciences*. Newbury Park, London: Sage.
- Moles, A. A. (1971). *Sociodynamique de la culture*. Paris: Mouton.
- Peterson, R. A. and Kern, R. M. (1996). Changing Highbrow Taste: From Snob to Omnivore. *American Sociological Review*, **61**, 900–907.
- Peterson, R. A. and Simkus, A. (1992). How Musical Tastes Mark Occupational Status Groups. In Lamont M. and Fournier, M. (Ed.), *Cultivating Differences: Symbolic Boundaries and the Making of Inequality*, University of Chicago Press, Chicago: chapter 7, pp. 152–186.
- R Development Core Team (2005). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0.
- Rose, D. and Pevalin, D. J. (Eds) (2003). *A Researcher's Guide to the National Statistics Socio-economic Classification*. London: Sage.
- Sintas, J. L. and Alvarez, E. G. (2002). Omnivores Show up Again: The Segmentation of Cultural Consumers in Spanish Social Space. *European Sociological Review*, **18**, 353–368.
- Skelton, A., Bridgwood, A., Duckworth, K., Hutton, L., Fenn, C., Creaser, C. and Babbidge, A. (2002). Arts in England: Attendance, Participation and Attitudes in 2001. Research report 27, The Arts Council of England, London.
- van Eijck, K. (2001). Social Differentiation in Musical Taste Patterns. *Social Forces*, **79**, 1163–1184.
- van Rees, K., Vermunt, J. and Verboord, M. (1999). Cultural Classifications under Discussion: Latent Class Analysis of Highbrow and Lowbrow Reading. *Poetics*, **26**, 349–365.
- Vermunt, J. K. and Magidson, J. (2003). *Latent GOLD User's Guide*. Belmont, MA: Statistical Innovations Inc.
- Vermunt, J. K. and Magidson, J. (2005). *Technical guide for Latent GOLD 4.0: Basic and Advanced*. Belmont, MA: Statistical Innovations Inc.
- Warde, A. (1997). *Consumption, Food and Taste*. London: Sage.
- Warde, A., Tomlinson, M. and McMeekin, A. (2000). *Expanding Tastes? Cultural Omnivorousness and Cultural Change in the UK*. The University of Manchester CRIC Discussion Paper No.37.
- Weber, M. ([1922]/1968). *Economy and Society*. Berkeley and Los Angeles: University of California Press.
- Weininger, E. B. (2005). Pierre Bourdieu on Social Class and Symbolic violence. In Wright, E. O. (Ed.), *Approaches to Class Analysis*, Cambridge University Press, Cambridge: chapter 4, pp. 116–165.
- Wilensky, H. L. (1964). Mass Society and Mass Culture: Interdependence or Independence? *American Sociological Review*, **29**, 173–197.
- Wynne, D. and O'Connor, J. (1998). Consumption and the Postmodern City. *Urban Studies*, **35**, 841–864.
- Yamaguchi, K. (2000). Multinomial Logit Latent-class Regression Models: An Analysis of the Predictors of Gender-role Attitudes Among Japanese Women. *American Journal of Sociology*, **105**, 1702–1740.

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Manuscript received: December 2005