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Measuring Poverty: The Case for a Sociological Approach[1]

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2.1   Introduction

We could not fault our readers for approaching yet another treatise on the proper way to measure poverty with a healthy degree of scepticism and more than a little irritation. Haven't academics been debating issues of measurement endlessly? Isn't it high time to stop debating and get on with the tasks of measuring poverty, developing policy, and taking action? We too would have hoped that by now a framework for measuring poverty and inequality would be as well developed as our sprawling and influential social indicator system for measuring total economic output. The unfortunate fact of the matter, however, is that a comprehensive and consensual framework is not in place, and such tools as now exist are not fully adequate to the task of representing the structure of poverty. The purpose of this chapter is to expose some of the assumptions about poverty measurement with which the disciplines of sociology and economics have been burdened, to show that these assumptions have not always served scholars in these disciplines well, and to develop a framework for poverty measurement that provides a more rigorously empirical foundation for measurement.

When scholars measure and analyse poverty, they typically do so with whatever measurement approach happens to be preferred within their discipline or theoretical camp; and in this sense their preferred measurement approach becomes little more than a badge of affiliation. As shown in Table 2.1, economists have tended to default either to an income paradigm or to a multidimensional capabilities framework,

Table 2.1   Examples of preferred measurement models by discipline

Discipline	Measurement approach	
	Gradational	*Multidimensional*
Economics	Income (i.e., the 'income paradigm')	Capabilities approach
Sociology	Income (i.e., the 'income paradigm')	Social class (e.g., the 'underclass')

with the decision between these two approaches typically being made on the basis of the 'school' to which the scholar subscribes, not any empirical evidence. Similarly, when sociologists choose between an income paradigm or a social class formulation (featuring, for example, a postulated 'underclass'), the decision is again mainly a function of preexisting theoretical commitments rather than narrowly empirical considerations. As a result, relatively little effort has been made to choose or adjudicate among measurement approaches on scientific grounds, even though the decision is a fundamentally empirical one.

It is difficult to justify such an aggressively non-empirical approach to measurement. We seek to develop here a stronger empirical foundation for poverty measurement by describing a modelling framework that may be used to determine whether poverty takes a gradational, categorical, or disorganized form. This framework exploits recent developments in latent class modelling to describe the underlying structure of a multivariate space made up of endowments and investments (such as education), working conditions (such as autonomy and authority), and rewards (such as income and wealth). If a gradational form emerges, our framework will allow researchers to assess whether or not conventional income-based approaches adequately specify the relevant gradient. If instead a categorical or 'class' form emerges, our framework will allow researchers to determine how many poverty classes there are and whether those classes correspond to existing sociological models of social classes. Although our objective here is merely to describe this new framework, we will be applying it in subsequent research.

2.2   The poverty measurement literature in economics and sociology

The intellectual backdrop for our project is the quite striking disarray within the field of poverty measurement. Within economics, now-standard critiques of unidimensional, income-based measurement of poverty (the 'income paradigm') rest mainly on the argument that income fails to 'take cognizance of other aspects of the quality of life that are not well correlated with economic advantage' (Nussbaum, 2006, p. 47; Bourguignon, 2006; Sen, 2006). This line of criticism has led to calls for multidimensional strategies for measuring and analyzing inequality and poverty. The most famous multidimensional measure, the Human Development Index (HDI), is closely monitored throughout the world (UNDP, 2001), but has been widely criticized as simplistic and under-theorized (for example, Kanbur, 2001) and hence has spurred much revisionist work.[2]

The resulting industry of multidimensional index building is unsatisfying in two ways. First, any attempt to reduce the multidimensional space of poverty into a single scale, such as HDI or any other index, will be descriptively misleading insofar as the underlying space is not in fact unidimensional. This simple observation has sparked much fretting among economists about the difficulty of parsimoniously characterizing the structure of poverty once multiple dimensions are allowed (Sen, 1997). To be sure, the dominance approach may allow us to order two or more populations in terms of their overall amount of poverty (within the context of a multidimensional poverty space), but such methods treat the shape or form of poverty as relevant only insofar as they affect conclusions about the overall amount (see Duclos, Sahn, and Younger, 2005). We will be arguing, to the contrary, that the structure of poverty regimes cannot be fully understood without elevating issues of shape and form to center stage. That is, in addition to asking whether population A has more poor people than population B, we should additionally ask whether poverty in either population takes on a gradational form, a class form, or a 'postmodern' form in which advantage and disadvantage are partly compensating. It is striking that, even as multidimensionalism becomes ever more fashionable in development economics, there is a continuing fascination with reducing comparisons to a single graded dimension. The commitment to multidimensionalism within development economics is in this sense quite superficial.

The second main concern with conventional indices is that they are purely statistical summaries and fail, therefore, to capture in any obvious way the structure of institutionalized social groups. In indices such as HDI, no effort is made to measure the social organization of inequality, especially the emergence of social networks, norms, and 'adaptive preferences' (such as tastes or culture) among people who are in similar life situations and circumstances. It is simply assumed that the sum of three variables provides an adequate description of poverty. Because the social organization of poverty is wholly ignored, the policy recommendations coming out of analyses of HDI have almost invariably treated poverty as an individual-level phenomenon that can be addressed with individual-level policy, such as increasing the human capital of some subpopulations (Grusky and Kanbur, 2006).

Within sociology, the lure of unidimensional gradationalism has historically been strong as well, although it has played out principally in the form of socioeconomic scales of occupations. As with HDI, these scales are merely weighted combinations of analytically separable dimensions, namely education and income (applied, however, to occupations rather than countries or individuals). It was not so long ago that these scales were understood among sociologists as capturing the most fundamental features of the inequality space. The massive research literature on these scales, a literature that eerily foreshadows the contemporary HDI literature, focused principally on the complications that arise in reducing a multidimensional space into a unidimensional one (see Hauser and Warren, 1997). For our purposes, we can safely ignore this literature, not just because socioeconomic scales have largely fallen out of fashion within sociology, but also because they only index the social location of currently or recently employed workers and cannot, as a result, be readily applied to the study of poverty. Among sociologists who prefer a gradational model, poverty has therefore typically been studied in terms of an income paradigm, just as in economics.

This is not to suggest that the income paradigm is dominant within sociology. The distinctive contribution of sociology to the study of poverty is arguably a 'class model' that characterizes individuals in terms of (i) the extent of their attachment to the labour market (measured by, for example, age-adjusted amount of labour force experience), and (ii) the sector or class in which employment most frequently occurs (if it does at all). Although there are all manner of competing class models of poverty, perhaps a leading candidate for a standard model is a three-class formulation that includes an 'underclass' with virtually no attachment or commitment to the labour market, a 'formal-sector poor' with a precarious attachment to low-wage labouring and service employment, and an 'informal-sector poor' with a precarious attachment to self-employment in the labouring and service sector.[3] The informal-sector category is populated by self-employed street vendors, day labourers, taxicab drivers, and all manner of other labouring and service occupations that are frequently taken up when formal-employment opportunities are scarce. In more developed countries, the formal sector tends to be larger than the informal sector, yet pockets of substantial informal employment can still be found in immigrant enclaves and the inner city.

The class model of poverty is further complicated because these three poverty classes take on very different forms in urban and rural settings. Although an underclass is present in both settings, the inner-city underclass is often distinguished by extreme segregation into spatially demarcated poverty neighbourhoods, dense intraclass interactions, and a greater likelihood that a class culture will emerge within these neighbourhoods of dense interactions. The other poverty classes take different forms across these settings because the constituent occupations differ. In rural economies, primary sector activities tend to dominate (especially agricultural labour), and such activities imply a very distinct type of poverty experience (most notably highly cyclical employment). The full sociological model of poverty is obtained, then, by cross-classifying the setting (rural, urban) with the three categories outlined above (the underclass, formal-sector poor, informal-sector poor).

This formulation potentially solves each of the two problems with conventional multidimensionalism to which we referred earlier. The daunting complexity of the multidimensional poverty space is addressed by brazenly characterizing it in terms of a relatively small number of categories, and the purely nominal, statistical character of conventional scales (such as HDI) is overcome by making explicit reference to institutionalized groupings (such as the 'underclass'). It is not difficult to understand why many sociologists have found class models attractive. As sociologists ourselves, we must confess to no small sympathy for the class approach, but we also question our discipline's characteristic assumption that class models should be blithely adopted without any evidence in support of the strong assumptions they embody. On this matter the disciplines of economics and sociology are equally disappointing. That is, just as economists have not typically treated HDI or the income paradigm as testable claims about the structure of the poverty space, so too sociologists have not typically treated class formulations as testable claims

about its structure. We turn below to the task of converting measurement models into hypotheses.

2.3   A multidimensional inequality space

The first step in building a multidimensional account is to develop a list of life conditions that, taken together, adequately characterize the inequality space. If the relevant literatures in economics, sociology, and philosophy are consulted (see, for example, Bourdieu, 1984; Nussbaum, 2006), one finds considerable agreement on the following three classes of variables: (1) *investments and endowments* (*I*) refer to formal schooling, vocational schooling, and literacy; (2) *working conditions* (*C*) refer to authority, autonomy, mobility prospects, union status, type of employment contract (for example, salaried or wage), and type of labor market (for example, firm size); and (3) *rewards* (*R*) refer to earnings, investment income, income from welfare, and wealth. This list omits variables that are typically unavailable in large-scale surveys (for example, IQ) or that are best viewed as the consequences of poverty or inequality rather than their constituents (for example, attitudes, health, or consumption practices). It is nonetheless comprehensive enough to shift the burden of proof to those sceptics who believe that adding more variables would lead to fundamental changes in our understanding of poverty and inequality.

The various measurement paradigms on offer can now be understood as making different simplifying assumptions about this space. The income paradigm, for example, is built on the assumption that inequality is gradational and can be parsimoniously captured by a single, master income variable. Under this formulation, inequality and poverty are 'all or nothing' affairs in which high-income individuals are advantaged on all dimensions and low-income individuals are disadvantaged on all dimensions. The gradationalism of the income paradigm also implies that there are no subpopulation clusters (that is, classes) in which the dimensions of interest are independent of one another.

By contrast, the class paradigm assumes that the poverty space resolves into distinct bundles of conditions, with the scores on the dimensions being independent *within* these bundles. The poverty space is not only lumpy and discontinuous but may additionally encompass at least some bundles in which advantages and disadvantages come together as 'compensating differentials'. The relatively low wages of the routine non-manual class are coupled, for example, with working conditions that are comparatively desirable. These types of inconsistencies underlie the insistence on the part of some class analysts (see, for example, Erikson and Goldthorpe, 1992) that class categories do not form any simple unidimensional gradation.

It is conventional to apply a class model to the entire inequality space rather than just the least desirable sectors of it. Indeed, many class models ignore the underclass altogether, simply defining it away by restricting attention to individuals in the formal labour force. There is much debate among sociologists about the structure of classes within these more desirable sectors of the inequality space (see Wright, 2005). Rather than attempting any summary of those debates, we simply note that many, but not all, class models are based on aggregate occupational categories

(for example, professionals, managers, routine non-manuals, craft workers, and operatives). These classes are typically presumed to imply a relatively strong and reliable attachment to the labour market.

In all sectors of the inequality space, such classes can be understood as marking off deeply institutionalized bundles of conditions (investments, working conditions, and rewards), bundles that give structure to the inequality space and make it possible to characterize it parsimoniously. The underclass, for example, is defined by an exceedingly weak attachment to the labour force and is characterized by poorly developed human capital investments (such as limited schooling), inferior working conditions (whenever there is engagement with the formal or informal labour market), and a weak economic situation marked, in particular, by high reliance on programme income rather than earnings. The formal-sector poor, by contrast, have a stronger (but still precarious) attachment to labouring and service employment and are characterized by slightly more substantial human capital investments (such as vocational training), slightly better working conditions, and slightly more income, most of which now comes from earnings. Similarly, the informal-sector poor are also concentrated in low-level labouring and service jobs, but they are self-employed rather than employed. The various non-poverty classes are likewise defined by structural positions in the division of labour (that is, occupations) and are presumed to capture the most prominently institutionalized packages of life conditions. The class of craft workers, for example, has historically comprised individuals with moderate educational investments, substantial investments in vocational training, relatively desirable working conditions, and average income.

2.4   Latent class models

To this point we have argued that the income and class paradigms embody hypotheses about the structure of the multidimensional inequality space. How might these hypotheses be tested?

We will show that the answer lies with exploratory and confirmatory latent class models, both of which are tailor-made for the measurement approach that we are developing. Until recently, latent class models for continuous and categorical indicators developed along separate tracks, thus precluding any analyses that combined the two scale types. However, these two tracks have now joined, making it possible to apply latent class models to mixed-mode data with both continuous and categorical indicators (see Vermunt and Magidson, 2002; Magidson and Vermunt, 2002; Hagenaars and McCutcheon, 2002). The latent class model for such mixed mode data can be represented as follows:

$$f(\mathbf{y}_i/\theta) = \sum_{k=1}^{K} \pi_k \prod_{j=1}^{J} f_k(y_{ij}/\theta_{jk}). \qquad (2.1)$$

Here, $\mathbf{y}_i$ denotes the respondent's scores on the manifest variables, K is the number of latent classes, π_k refers to the probability of belonging to the kth latent class (thus

indexing latent class sizes), J denotes the total number of manifest variables, and j is a particular manifest variable. The distribution of y_i is a function of the model parameters of θ that takes the form of a mixture of class-specific densities (that is, $f_k(y_{ij}/\theta_{jk})$).

We need to specify the appropriate univariate distribution for each element y_{ij} of y_i. For continuous y_{ij}, the natural choice is the univariate normal, whereas for discrete nominal or ordinal variables it is the (restricted) multinominal. It is typically assumed that the manifest variables are independent within latent classes and that all of the observed association between manifest variables is therefore attributable to the particular patterning of latent class membership. That is, whenever a class member has a score that deviates from the class mean, this deviation doesn't convey any information on the likelihood of deviating on any of the other variables. The so-called assumption of local independence can be relaxed, yet we insist on it because it captures a main constraint embodied in the class hypothesis.

This framework may be used, then, to define various measurement models and to assess the extent to which the structure of the inequality space is consistent with those models. In all cases, our measurement models are best regarded as ideal types, with the question at hand being whether the structure of poverty and inequality is becoming more or less consistent with that ideal type.

2.5   Ideal-typical poverty spaces

We illustrate this approach by considering a simplified case in which the poverty space is defined by only three variables. Although we leave these hypothetical variables unspecified in the following discussion, it may be useful to imagine that one variable has been arbitrarily selected from each of the three classes of life conditions that define the multidimensional space (investments and endowments, working conditions, rewards). We would of course use the full complement of variables in any actual analysis.

The graphs presented below will represent the 'poverty subspace' as it might appear in either the rural or urban setting. In an actual latent class analysis, one is well advised to fit models to the full inequality space, even if one mainly wishes to test hypotheses about the structure that emerges in the less desirable sectors of that space (hereafter, the 'poverty space'). If the full space is analysed, it becomes possible, for example, to examine how distant the poverty classes are from other, more desirable classes in the inequality space.

We use three symbols to signify manifest class membership: (i) squares index membership in the underclass; (ii) triangles index membership in the formal-sector poverty class; and (iii) circles index membership in the informal-sector poverty class. We also allow for the possibility of two sub-classes emerging within each of these three big classes. The formal-sector poverty class might, for example, be divided into two sub-classes, one pertaining to labourers (indexed by light triangles) and another to service workers (indexed by dark triangles). The other big classes are likewise populated by two shadings that will signal possible sub-class sectors.

We can now lay out some of the lines of questioning opened up by this new approach to poverty measurement. We begin by asking whether the poverty space
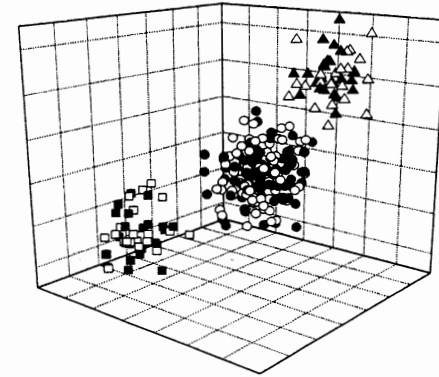

Figure 2.1   Big-class regime

takes on a form consistent with class models and then ask whether the space takes on a form consistent with the income paradigm and other non-class models. Throughout this presentation, it should be borne in mind that our particular three-class specification is purely illustrative, merely one of the many class models that might be examined.

Can standard big-class models capture the association in the poverty space? As we have argued, the implicit claim of class analysis is that the poverty space has a relatively low dimensionality, indeed a dimensionality no more or less than the number of postulated classes. This type of class model is conventionally treated as an assumption, but it may be tested by forcing the latent classes of Equation 2.1 to be perfectly defined by big-class membership, thus rendering latent classes manifest. The big-class solution, which is represented by Figure 2.1, implies that the individual-level variables are independent of one another within each big class and that sub-dividing into micro-classes or allowing for a gradational structure within big classes is accordingly unwarranted. If the observed data appear as in Figure 2.1, one would not be able to reject this big-class constraint.

Are there non-sociological big classes? The long-standing presumption among sociologists has been that poverty is generated at the 'site of production' and that our three manifest classes (or some other class model) will therefore account for the structure of poverty (see, for example, Parkin, 1979). Although the latent class model allows one to fit confirmatory models that test these 'sociological' class schemes, it can also be used to fit exploratory models that allow classes to freely emerge outside the site of production. As Figure 2.2 shows, the poverty space might resolve into big classes that are defined by characteristic packages of scores, without those classes also being consistent with conventional sociological categories defined at the site of production (the underclass, formal-sector poor, and informal-sector poor). This non-sociological solution is represented in Figure 2.2
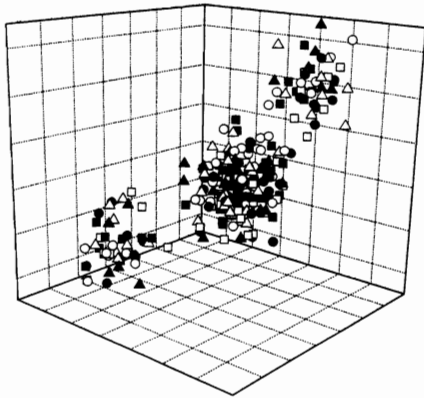
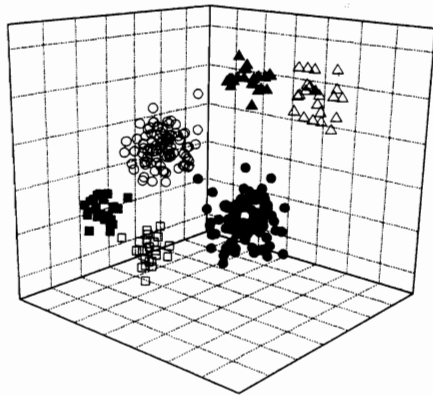*Figure 2.2*   Big-classes forming outside site of production

Figure 2.3   Micro-class regime

by populating each big class with an assortment of squares, triangles, and circles. If such a solution were secured, one would naturally wish to determine whether some other manifest variable, such as education, is defining these classes (see Meyer, 2001).

Are there micro-classes? The sociological big-class formulation might alternatively fall short because the three postulated classes are themselves amalgams of distinct subclasses. As shown in Figure 2.3, the independence constraint might be violated at the big-class level, but then hold once big classes are subdivided. We have elsewhere argued that the big-class categories of conventional class analysis are only weakly institutionalized in the labour market and that much of the structure at the site of production obtains at a lower occupational level (see Weeden and Grusky, 2005a; Grusky and Weeden 2006). It is possible, for example, that the 'formal-sector poor'
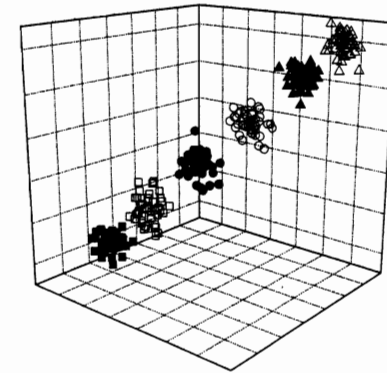

Figure 2.4   Gradational micro-class regime

is a wholly artificial amalgam and that the constituent occupations (construction labourers, gardeners, fast-food workers, and the like) differ substantially in the conditions they imply. If so, the poverty space will take on the more fissured form of Figure 2.3. We do not necessarily anticipate too many fissures of this sort. Although some micro-class distinctions will no doubt emerge, it has to borne in mind that occupationalization is less developed at the bottom of the class structure and that such distinctions may therefore be comparatively weak relative to what prevails in the professional sector and some of the other 'home grounds' of occupationalization (Weeden and Grusky, 2005b).

Is the poverty space gradational? In Figures 2.1–2.3, we have assumed that the class structure cannot be understood in simple gradational terms, meaning that at least some classes are formed by combining high values on one dimension with low values on another. The gradationalist challenge to conventional class models involves the claim that big classes or micro classes can be scaled on one or more dimensions (see Figure 2.4). We can test for such a structure by estimating scale values for the manifest classes or, less restrictively, by imposing ordinality constraints on them (see Rost, 1988; Croon, 2002). This test for gradationalism will be accepted insofar as classes are hierarchically ordered in terms of the extent to which they imply advantage or disadvantage. Although there is much research on how particular dimensions of inequality (especially income) are changing, we don't know whether late-industrialism has also brought on a form of crystallization in which the dimensions that make up the poverty and inequality space are coming together to form a more purely gradational structure.

Does inequality take on a fractal character? Although the regimes of Figures 2.2–2.4 are inconsistent with standard sociological class models, they nonetheless salvage the class concept in revised form by allowing for non-sociological classes (Figure 2.2), micro-classes (Figure 2.3), and gradational classes (Figure 2.4). By contrast, Figure 2.5 represents a case in which the class concept itself must be rejected because, no
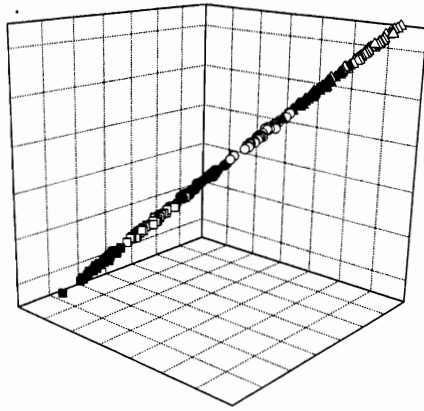
Figure 2.5 Fractal individualized inequality

Figure 2.6 Disorganized inequality

matter the level of disaggregation, the underlying variables continue to covary with one another. This ideal type may be understood as an extreme micro-class solution in which the diagonal of Figure 2.4 thins out to the point where each individual becomes a class unto himself or herself. We refer to this solution as fractal because the same gradational solution is apparent at each and every level of disaggregation. The economist should recognize this solution as consistent with the claim that income is a master variable, that it perfectly signals all other individual-level measures of inequality, and that no higher-level class organization therefore appears. Obviously, this ideal type would never be empirically realized in such extreme form, but it is nonetheless important to ask whether the simple income paradigm comes closer to being realized in some societies or time periods than in others.

Is inequality becoming increasingly disorganized? The regime of Figure 2.6, in contrast to that of Figure 2.5, doesn't allow the underlying individual-level variables to covary. This may be understood as a 'one class' solution or, equivalently, a non-class regime. Although there is much inequality under this specification, it takes a uniquely structureless form in which the independence assumption holds throughout the poverty space, not just within a given latent class. This ideal type is again very extreme and not likely to hold in any known poverty space. We have presented it here simply because it is important to monitor the extent to which the poverty space is becoming more or less organized (see Pakulski, 2005).

We can't claim to have exhausted here the many ideal-typical forms that either class-based or classless poverty regimes might assume. Rather, we wish merely to stress the importance of developing a methodology for characterizing the form as well as extent of poverty, a task that takes on special importance once the multi-dimensionality of inequality is appreciated. This approach allows us to explicitly test long-standing disciplinary assumptions about the structure of poverty.
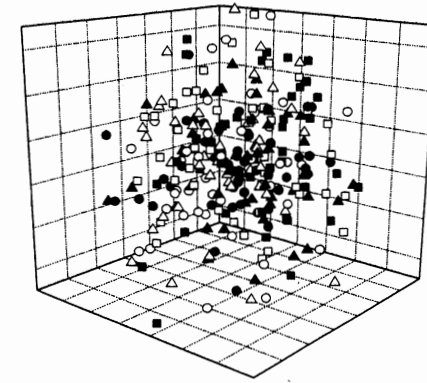
2.6 Class effects

How might defenders of the income or class paradigm react insofar as it is shown that their approaches cannot well represent the poverty space? There are many possible reactions, but perhaps the main choices are to (i) simply concede that a more complicated representation of the poverty space is indeed required, (ii) argue that the poverty space was operationalized in an excessively encompassing way and therefore includes superfluous dimensions that fall outside the poverty concept, or (iii) argue that the preferred approach, while failing to represent the poverty space in its entirety, nonetheless captures those features of the space that are important in explaining outcomes or social behaviors of interest (for example, Goldthorpe and McKnight, 2006). As we see it, argument (ii) is entirely non-empirical and hence beyond our purview, whereas argument (iii) is an explicitly empirical claim and hence worth considering in some detail.

If the objective is indeed to measure poverty in terms of classes or variables (most obviously income) that have true causal effects, presumably much research effort should be devoted to establishing such effects. We haven't, however, seen much effort of this sort to date. The challenge here is to offer convincing evidence that inter-class differences in behaviour cannot be explained away as the effects of (i) investments and endowments that drive selection into particular classes, (ii) working conditions, including unionization or authority, that can affect how interests are gauged and behaviors selected, and (iii) job rewards (for example, income) that likewise may affect how interests are gauged and behaviours selected. If, for example, one finds that an apparent 'underclass effect' on political behavior disappears when income is controlled, then presumably one can refer only to an income effect on politics, not a true class effect. The case for a true class effect likewise requires controlling for all the other constituent dimensions of the poverty or inequality space.

Why might net effects of class be detected even with such rigorous controls? In addressing this question, what must be stressed is that classes are organic packages

of conditions, and the constituents of these packages may combine and interact in ways that lead to an emergent logic of the situation. The underclass may be understood as a combination of negative conditions (limited education, limited experience, low income) that, taken together, engender a sense of futility, despondency, or learned helplessness that is more profound than what would be expected from a model that simply allows for independent effects of each constituent class condition (Wilson, 2006). To be sure, a committed reductionist might counter that, instead of allowing for class effects, one merely needs to include the appropriate set of interactions among the constituent variables. This reformulation is correct but unhelpful; that is, insofar as classes define the relevant packages of interacting conditions, it just becomes an unduly complicated way of sidestepping the reality of classes.

The foregoing may be understood, then, as a rational action interpretation of how class effects are generated as class members attempt to optimize, satisfice, or otherwise react to the emergent logic of their class situation. The second main argument for a net class effect rests on the claim that class-defined packages of conditions are associated with distinctive cultures that take on a life of their own and thus independently shape behaviour and attitudes. At minimum, class cultures may simply be 'rules of thumb' that encode optimizing behavioural responses to prevailing environmental conditions, rules that allow class members to forego optimizing calculations themselves and rely instead on cultural prescriptions that provide reliable short cuts to the right decision. The 'formal-sector poor' may disparage educational investments not because of some maladaptive oppositional culture but because such investments expose them to an especially high risk of downward mobility (see Goldthorpe, 2000). Typically, the children of the working poor lack insurance in the form of substantial family income or wealth, meaning that they cannot easily recover from an educational investment gone awry; and those who nonetheless undertake such an investment therefore face the real possibility of utter ruin. The emergence, then, of a poverty culture that regards educational investments as frivolous encodes this conclusion and thus allows poor children to undertake optimizing behaviors without explicitly engaging in decision-tree calculations.

If one allows for class cultures of this sort, it is not entirely clear that such cultures always develop at the national level. After all, an underclass culture is presumably generated and transmitted at the city or neighbourhood level, where members of the underclass interact with one another, develop shared interpretations of their situation and how best to react to it, and transmit those interpretations to one another (see Wilson, 2006). Given that inner cities differ in their industrial mix, employment opportunities, and welfare programmes, the environment that underclass members face may differ substantially by city, and so too will the rule-of-thumb cultures that emerge. The most important fissures within the underclass may therefore be defined by cities rather than detailed occupations.

Can these fissures be overcome? In some countries, the underlying environmental conditions will be much the same across all inner cities, thus breeding rule-of-thumb cultures that are likewise much the same. Because there is very little cross-city contact among underclass members, the rise of a national underclass culture must be understood as a patchwork of many local cultures that independently 'hit upon' the same rule-of-thumb interpretations, not the result of any cross-city diffusion of such interpretations. In some cases, political elites or other opinion leaders may also act as vanguard intellectuals who broadly instruct all underclass members on the proper interpretation of their situation, thereby creating cross-city homogeneity that is top-down in its origins rather than bottom-up. This top-down process takes place mainly within countries, such as Venezuela, in which the underclass is large enough to induce party elites to build a political platform tailored to its putative interests.

This line of reasoning suggests that defenders of class analysis need not shy away from an empirical test of class effects. It is altogether possible that real big-class or micro-class effects will surface and provide a further rationale for measuring poverty in terms of classes. We nonetheless see no great rush among class analysts to carry out such tests. In this sense, class analysts have behaved rather like stereotypical economists, the latter frequently being criticized (and parodied) for their willingness to assume almost anything provided that it leads to an elegant model.

2.7 Conclusions

It should by now be clear that sociologists operating within the class-analytic tradition have adopted very strong assumptions about how poverty is structured. The class concept may be motivated either by claiming that the inequality space has a (low) dimensionality that equals the number of social classes or by claiming that the class locations of individuals have a true causal effect on behaviors, attitudes, or practices. These claims, like those underlying the income paradigm, have long been unstated articles of faith. We have suggested that progress in the field depends on converting such disciplinary priors into testable hypotheses about the structure and form of poverty.

These tests are best conducted within the multidimensional poverty space. Although the turn to multidimensionalism is prominent in development economics and other fields, the approach has foundered to date for lack of a compelling methodological platform. We have argued that latent class modeling, which has now been generalized to accommodate mixed mode data, provides precisely the platform needed to test our disciplinary assumptions about the structure of poverty.

The further virtue of this platform is that it allows us to monitor changes in the shape and form of poverty. Although we know much about trends in the amount of poverty, we know rather less about trends in its form; and the form of poverty may be just as consequential as the amount in understanding how it is experienced and how it may develop. We don't know, for example, whether poverty is increasingly taking on a highly organized class form, whether new types of inconsistencies and disorganization are emerging within the poverty space, or whether poverty is increasingly assuming a simple gradational-form of the sort that the income paradigm implies. These gaps in our knowledge can only be addressed by developing a

multidimensional monitoring system that moves beyond simplistic measurements of headcounts and treats distributional issues of inequality with the same seriousness that is accorded measurements of total economic activity and output.

Notes

1. The research reported here was supported with discretionary funds from Stanford University and Cornell University. We are grateful for the comments of participants in the United Nations Development Programme International Conference on Multidimensional Poverty, 29–31 August 2005, Brasilia, Brazil.
2. Although HDI was initially treated as an aggregate index (measured at the country level), it has subsequently been recast as an individual-level index.
3. There is also a long tradition of class scholarship in which the underclass is simply defined away by virtue of restricting analysis to members of the labour force. We will be focusing here on more encompassing class models that treat the absence of a strong attachment to the labour force as the defining feature of membership in the 'underclass'. In operationalizing the underclass, the objective is to identify those who are at risk of being in the labour force, but who have not evinced much labour force activity in the past.

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