Science and Sociology: Predictive Power Is the Name of the Game, by **Sheldon Ekland-Olson** and **Jack P. Gibbs.** New York: Routledge, 2018. 158 pp. $41.95 paper. ISBN: 9781138047846.

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The main thesis of *Science and Sociology: Predictive Power Is the Name of the Game* is in its title: for sociology to become scientific it has to make predictions. Predictions refer to assertions about yet-unexamined facts, be those in the past, present, or future. Authors Sheldon Ekland-Olson and Jack P. Gibbs, distinguished sociologists, are not naïve. They are painfully aware of the many difficulties and complexities of their chosen path and try to address many of them. (Curiously, they completely ignore similar arguments made by economists, including Milton Friedman's famous 1953 essay on the methodology of positive economics.) Along the way they pick fights with an impressively varied set of schools of thought: interpretive sociology, postmodern sociology, Marxist sociology, historical sociology, ethnography, quantitative sociology based on multivariate statistical analysis, and functionalism, to name a few. Karl Marx, Max Weber, Erving Goffman, Talcott Parsons, Otis Dudley Duncan, Nicos Poulantzas, Judea Pearl, and Joe Feagin are some of the scholars they call on the carpet. This is an ambitious and, in its own way, original book that aspires to redirect the entire sociological enterprise.

The authors' point of departure is that by the standards of Newtonian and Einsteinian physics, sociology falls short as science and, worse, recently many sociologists have explicitly abandoned the scientific aspirations of the discipline, taking a turn that is ideologically driven, empirically vacuous, and rooted in a relativistic epistemology. The book proposes an alternative. Sociology is about empirically testable assertions or predictions about clearly defined units (people, cities, countries, events, etc.). Of any two theories, the one that predicts better should be preferred.

To assess predictive power, they list no fewer than seven dimensions of comparison. *Testability* means the theoretical statement can be translated in some agreed way into something that is measurable. The authors are aware not just that the measurement process is complex and rarely unambiguously determined by custom or theory, but repeated tests can give different results. *Predictive accuracy* is assessed by some measure of association that can gauge its direction, form, and degree. Acknowledging that measurement problems can affect accuracy and that the comparison of the accuracy of predicting ordinal versus ratio/interval (as well as continuous and categorical) variables may be difficult, the authors throw up their hands and write that "correct predictions though only as to the direction of the association . . . should be an occasion of wild celebration" (p. 40).

The troubles don't end there. What if the relationship is non-monotonic? What if there is a threshold below or above which the relationship doesn't exist? What if the prediction involves several variables in a complex pattern? Here, as in so many places, a rhetorical flourish is offered in place of an answer. Within the framework of multivariate statistics there are answers to these questions, but the authors take a dim view of multivariate analysis, to which we will return.

Range refers to the breadth of the kinds of units the prediction is about, while *scope* is the variety of dependent variables the prediction covers. Then we get to what I consider one of the book's more interesting contributions, the authors' insistence on the importance of what they call *time-space specificity.* Our sociological theories tend to be vague as to where and when they apply. Worse, most theories are fuzzy about the temporal distance between the factors they connect. If growth in inequality predicts a rise in crime, does that happen everywhere? Just in the United States? Just in large cities? Does it happen always? Throughout the twentieth century? Only in the 1990s? And does the growing income gap result in more crime immediately? Only after a year? Or a decade? While it runs counter to the range criterion, without

being very specific about space and time, we cannot evaluate predictions.

Discriminatory power is a bit opaque, but my best understanding is that it is the theory's ability to correctly distinguish among its own theorems (conclusions) through the evaluation of repeated predictions. Finally, *parsimony* is the ratio of theorems to premises in a given theory.

The book also offers us a method of ''formal theory construction.'' While the authors in many places lament that sociology does not use the language of mathematics, in their three-part phrase ''formal'' refers to ''theory construction'' rather than to ''theory.'' (There are no equations in the book.) To construct theory, first we have to clarify our *unit terms* (what is usually called ''unit of analysis''). The authors are aware that these units always require some definitions that are theoretically loaded (what is a city?), but they set that aside as the ''extrinsic part'' of the theory. They also understand that the unit terms can change over time. The unit terms have characteristics that are similar to variables, except the authors point out that the concept of the variable falsely suggests that the characteristics are independent of the unit terms they refer to. Residential density, for instance, means something entirely different when the unit is an apartment, a city block, or a city, so they prefer the phrase *characteristic terms*. There are three types of characteristic terms: constructs (ideas not intended for measurement), concepts (clearly defined and measurable) and referentials (operationalized concepts). Characteristic terms are linked by *relational terms* (e.g., greater . . . less). There are additional words in theories stated in natural language they call *residual terms*. (Confusingly, they list logical operators ''and'' and ''or'' as examples.)

Theories then have axioms, postulates, and theorems, all used here differently than in mathematics. Axioms are assertions of relationships that feature constructs, while postulates link only concepts. If concepts are translated into referentials, postulates are transformed into testable theorems. One suggestion of the authors is that if we start with a construct and we link it to more than one concept, each of which we subsequently convert into a referential, we can logically deduce a set of theorems. They call it the ''sign rule.''

Suppose we have the ''nebulous'' construct of class conflict. (Unlike the authors, I don't think class conflict is necessarily nebulous. One can measure it by counting strikes, workplace sabotage, political demonstrations, etc.; but that is not my point here.) If we can relate class conflict to the concept of income inequality by stating that (1) more income equality goes with less class conflict, and to intergenerational occupational social mobility by stating that (2) more mobility also begets less class conflict, we can deduce from these two ''untestable'' axioms a third testable theorem that (3) more mobility will go with more equality. (The authors add a third concept—crime—to mobility and equality, but I will keep it simple.) Once we have transformed those two concepts (mobility and equality) into well-measured referentials (and properly specified the units: time and space, etc.), we can test the theory by making predictions like this one: industrial countries in the second part of the twentieth century with more intergenerational occupational mobility will have more equality of personal income.

Alas, these predictions do not follow from the two axioms about class conflict. Imagine that mobility and equality are two alternative paths to decreasing class conflict. There will be countries like Denmark, with lots of mobility and equality and minuscule class conflict. In others both mobility and equality will be tiny, and class conflict will be rampant. Finally, countries with small mobility and large equality and those with great mobility and little equality will be somewhere in between. If the countries are evenly distributed among these four types, the relationship between mobility and equality will be zero. If the last two types dominate, the mobility and equality will have a negative relationship, not the positive one suggested above. Take another construct: discrimination. Being a woman and being African American are both positively related to discrimination, but gender and race are unrelated.

This takes me to the book's curious crusade against explanation and causation. We are told we only *read* explanations into (predictive) theories. The same prediction will

allow for many stories. Fixation on causation that is impossible to establish anyway is just an enabler of explanations, the scourge of scientific sociology. Yet the authors themselves cannot get away from the asymmetry of relationships implied by causation. They talk about dependent and independent variables, they use ''because'' to link concepts, and, more importantly, their predictions must decide temporal order (time-specificity).

Another odd battle they choose to fight takes on multivariate statistical analysis. This is strange because multivariate models are all about prediction. Their best argument against these models is that they often cover up complicated relationships by averaging patterns across the sample. There are ways to deal with that problem in multivariate models, but the authors simply ignore them. As a result, in the authors' world, predictions are based on bivariate relationships occasionally disturbed by a third variable, a form of averaging of its own kind.

This is not an easy book to read. Abstract discussions are peppered with unexpected colloquialisms, and oratorical hand-waving is frequently substituted for arguments. In the end, we learn more about why prediction is difficult than how to do it successfully. Yet, at a time when sociology is challenged both by new areas of scientific expertise, such as sociogenomics, socio-biology, and data science armed with powerful new technologies, and by aggressive political attacks hostile to expertise of any kind, sociologists cannot take a pass on trying to find the best way to settle disputes as good scientists should: with empirically grounded, rational arguments.

Feminists Rethink the Neoliberal State: Inequality, Exclusion, and Change, edited by **Leela Fernandes.** New York: New York University Press, 2018. 246 pp. $30.00 paper. ISBN: 9781479895304.

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What is at stake in efforts to transform neoliberalism? What are the potential effects for state power, economic resources, and social inequalities? *Feminists Rethink the Neoliberal State: Inequality, Exclusion, and Change*, edited by Leela Fernandes, applies a feminist lens to these timely questions. The essays in this volume examine theoretically rich and diverse case studies. Topics include development policies in India and Bangladesh, policing and education policy in the United States, political change in Ecuador, and fiscal austerity in the United States and Europe. The authors engage four central themes with broad impact. They address the restructuring of the state and civil society, consequences for inequalities and social exclusion, changing forms of governance and state power, and potential avenues for political and social change.

Fernandes introduces the concept of post-liberalization to go beyond archetypal notions of neoliberalism. Neoliberalism refers to 1) an ideology invested in the self-regulating power of markets and 2) a set of practices that privatize state functions and restrict state control of economic activity. The term post-liberalization, however, captures a range of practices and foregrounds the possibility for change. The authors also seek to deconstruct the categories of ''gender'' and ''women.'' The volume extends intersectionality by applying a situated feminist materialist analytic. This approach examines the context and consequences of each case. Moreover, it goes beyond traditional topics in gender and women's studies. The authors investigate a wide range of policies and practices central to a feminist praxis of understanding inequalities, broadly speaking.

''What's in a Word?'' asks Nancy Naples of demands for austerity measures. Austerity