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INTRODUCTION

Cultures of Objectivity

“Whatever logic is good enough to tell me is worth WRITING DOWN,” said the Tortoise. “So enter it in your book please.”

(*Lewis Carroll*, “What the Tortoise Said to Achilles,” *Mind*, 1895)

“OBJECTIVITY” arouses the passions as few other words can. Its presence is evidently required for basic justice, honest government, and true knowledge. But an excess of it crushes individual subjects, demeans minority cultures, devalues artistic creativity, and discredits genuine democratic political participation. Notwithstanding such criticism, its resonance is overwhelmingly positive. Attacks are rarely directed at true objectivity, but rather at pretenders who use it to mask their own dishonesty, or perhaps the falseness and injustice of a whole culture. Most often it is not closely defined, but simply invoked to praise or blame. In the United States, scientists, engineers, and judges are generally presumed to be objective. Politicians, lawyers, and salesmen are not.

There remains the delicate question of what these attributions of objectivity mean. It is not merely an all-purpose honorific, for it applies more readily to the despised bureaucrat than to the indispensable entrepreneur. It has, however, several distinct senses, which tend to reinforce the positive associations of the term and at the same time to obscure it. Its etymology suggests an acquaintance with objects. Paradoxically, to us, until the eighteenth century these were usually objects of consciousness rather than physical things; real entities existing outside of us were called subjects. But in current philosophical usage, objectivity is very nearly synonymous with realism, while “subjective” refers to ideas and beliefs that exist only in the mind. When philosophers speak of the objectivity of science, they generally mean its ability to know things as they really are.¹

An earlier generation, the positivists, considered such claims merely metaphysical, and hence meaningless. But they did not disdain using the term. There are other ways of construing the objectivity of science. The most influential has defined it by an ability to reach consensus. Normally it suffices if that consensus holds within a specialist disciplinary community. We might, with Allan Megill, call this “disciplinary objectivity,” by

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contrast to the “absolute objectivity” of the preceding paragraph. This form of objectivity is not self-subsistent. Its acceptability to those outside a discipline depends on certain presumptions, which are rarely articulated except under severe challenge. Specialists who claim objectivity should provide some evidence of their expertise. They should comport themselves appropriately. They should appear reasonably disinterested, or at least should not expect to speak authoritatively where their own individual or professional interests are at stake. We trust physicists to tell us about phase transitions in supercooled helium, but we are more skeptical if they appear as paid expert witnesses in court, or when they tell of the great economic advantages that will attend the construction of a superconducting supercollider.

Still, physicists control a large territory on which they are not called upon by outsiders to justify their conclusions. Disciplinary objectivity is made conspicuous mainly by its absence. Where a consensus of experts is hard to reach, or where it does not satisfy outsiders, mechanical objectivity comes into its own. Mechanical objectivity has been a favorite of positivist philosophers, and it has a powerful appeal to the wider public. It implies personal restraint. It means following the rules. Rules are a check on subjectivity: they should make it impossible for personal biases or preferences to affect the outcome of an investigation. Following rules may or may not be a good strategy for seeking truth. But it is a poor rhetorician who dwells on the difference. Better to speak grandly of a rigorous method, enforced by disciplinary peers, canceling the biases of the knower and leading ineluctably to valid conclusions.

The tension between the disciplinary and the mechanical senses of objectivity is a central concern of this book. But these two senses will not be discussed only on the terrain of science, and so it is important to consider also the meanings of objectivity in explicitly moral and political discourse. In most contexts, objectivity means fairness and impartiality. Someone who “isn’t objective” has allowed prejudice or self-interest to distort a judgment. The credibility of courts depends on an ability to elude such charges. They do so in large part by placing disputants in a highly controlled situation and authorizing independent judges and jurors to resolve the facts and apply the law. The objectivity of jurors means little more than their presumed disinterestedness, since by definition they lack special expertise. Judges too are expected to be impartial, though they should also be trained professionals. Their expertise must include an ability to follow the rules—mechanical objectivity—but there is no avoiding the judicious exercise of discretion.

Two of the three meanings discussed in Kent Greenawalt’s *Law and Objectivity* pertain directly to objectivity as fairness. “Legal determinacy” refers to the ability of any lawyer or other intelligent person to

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reach the same conclusions about what the law means. It does not require that existing law be morally defensible, but only that different judges will apply the law to most cases in the same way. So defined, this kind of objectivity is not the preserve of disciplinary insiders, though it may be that only those who have immersed themselves in the culture of law can attain this consistency of judgment. Greenawalt observes, next, that treating people impersonally according to “objective standards” is central to what we call the rule of law. This generally entails a rigid schedule of punishments for various criminal acts, and a minimum of opportunity for discretionary adjustments based on subjective inferences about character and intentions. Both these senses of objectivity imply that rules should rule, that professional as well as personal judgment should be held in check. They point to the alliance of objectivity as an ideal of knowing and objectivity as a moral value.²

It is important to understand that mechanical objectivity can never be purely mechanical. Greenawalt offers as an example the simple instruction, spoken by a manager as a subordinate enters her office: “Please shut the door.” It requires some experience of the world, and perhaps also of the office in question, to know which door, and when; to judge whether to mention first some reasons why it should remain open; and also to understand that if the company president suddenly appears at the door, the directive should be put aside. Rarely does any of this need to be spelled out, at least within one culture. Similar questions, including some much harder ones, will arise in filing papers, keeping accounts, taking a census, or preparing a graph. Especially in law, philosophy, and finance, where clever people make a business of exploiting ambiguities, much of what would otherwise go without saying ends up having to be said.

Mathematical and quantitative reasoning are especially valued under these circumstances. They provide no panacea. Mapping the mathematics onto the world is always difficult and problematical. Critics of quantification in the natural sciences as well as in social and humanistic fields have often felt that reliance on numbers simply evades the deep and important issues. Even where this is so, an objective method may be esteemed more highly than a profound one. Any domain of quantified knowledge, like any domain of experimental knowledge, is in a sense artificial. But reality is constructed from artifice. By now, a vast array of quantitative methods is available to scientists, scholars, managers, and bureaucrats. These have become extraordinarily flexible, so that almost any issue can be formulated in this language. Once put in place, they permit reasoning to become more uniform, and in this sense more rigorous. Even at their weakest point—the contact between numbers and the world—methods of measurement and counting are often either

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highly rule-bound or officially sanctioned. Rival measures are thereby placed at a great disadvantage. The methods of processing and analyzing numerical information are now well developed and sometimes almost completely explicit. Once the numbers are in hand, results can often be generated by mechanical methods. Nowadays this is usually done by computer.³

The growing role of quantitative expertise in the making of public decisions is a development well known to scholars. Yet we have no satisfactory histories of it. This is due mainly to a failure to integrate two rival views of the development of quantitative methods, and of expertise generally. One narrative treats their history as the progressive accumulation of truer, or at least more powerful, methods. The other reduces them to ideology, to be explained mainly in terms of social structures of domination, though with due regard to the often nefarious aims of their individual purveyors. These are the arguments of partisans, who for the moment have forgotten the value of nuance. But it is not merely moderation that is called for. Expertise, much more even than science, is not understandable as simply the result of solitary thinking and experimenting, or even of the dynamics of a disciplinary community. It is a relation between professionals—often academic scientists or social scientists—and public officials. Their appreciation for expertise, in turn, reflects their relationship to a still wider public. To understand the circumstances under which quantitative objectivity has come into demand, we need to look not only at the intellectual formation of experts, but even more importantly at the social basis of authority.

We now have a few studies that have taken this insight as their point of departure. One argument, particularly influential among American historians, holds that the social science of the 1890s and 1900s arose from a new sense of interdependence among Americans, and ultimately from the social and economic processes that produced that interdependence.⁴ There is doubtless something to this, even if a world economy did not abruptly form in the late nineteenth century. But the form of expertise that arose in specific response to this sense of interdependence is not the most important kind, and it is not at all characteristic of public uses of social science. It amounts, in Thomas Haskell's account, to a philosophical understanding of human interdependence, providing the consolation of explanation to a bewildered public. In fact there were a variety of rival forms of explanation of the industrialized social world, not all of them consoling, and most coming from preachers or labor organizers rather than professors. Academic social scientists have had only the most modest success in forming public opinion. The principal audience for their expertise is a bureaucratic one, usually with the acquiescence of elected officials.⁵ The public culture licenses academic spe-

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specialists not to issue general pronouncements, but to assemble very specific findings.

To be sure, this is not the only kind of expertise. There is a kind of wisdom that comes from long experience, which often is passed on from parent to child or master to disciple. In modern times, personal experience and contact with a master have increasingly been supplemented or replaced by formal instruction at a university or other educational institution. There the ineffable skill of the craft or guild is, so far as possible, made formal and explicit, and thus the secrets of the trade are deemphasized. To citizens of large-scale democratic societies, this is more acceptable because it is more open and less personal. Nevertheless, expert knowledge is almost by definition possessed by only a few, and no such art is ever reduced to a handful of rules that can be looked up and mastered by anyone with a textbook. Thus the intuition or judgment of specialists continues to command a degree of respect, even if the doctor, for example, cannot explain exactly why the problem must be in the liver. Still, both physicians and patients have learned not to be satisfied with an opinion based on little more than intuition. Better to apply an instrument, to take a culture, to produce some specific evidence.

In public even more than in private affairs, expertise has more and more become inseparable from objectivity. Indeed, to recur to the previous example, it is in part because the relation of physician to patient is no longer a private one—due to the threat that it might be opened up in a courtroom—that instruments have become central to almost every aspect of medical practice. In public affairs, reliance on nothing more than seasoned judgment seems undemocratic, unless that judgment comes from a distinguished commission that can be interpreted as giving representation to the various interests. Ideally, expertise should be mechanized and objectified. It should be grounded in specific techniques sanctioned by a body of specialists. Then mere judgment, with all its gaps and idiosyncrasies, seems almost to disappear.

This ideal of mechanical objectivity, knowledge based completely on explicit rules, is never fully attainable. Even with regard to purely scientific matters, the importance of tacit knowledge is now widely recognized.⁶ In efforts to solve problems posed from outside the scientific community, informed intuition is all the more crucial. The public rhetoric of scientific expertise, however, studiously ignores this aspect of science. Objectivity derives not mainly from the wisdom acquired through a long career, but from the application of sanctioned methods, or perhaps the mythical, unitary “scientific method,” to presumably neutral facts. There should be no room for the biases of the researcher to corrupt the results. It is, of course, possible for investigators or officials to be impartial as a result of their inherent fairmindedness, or perhaps their

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utter indifference to the outcome, but how can we know? In a political culture that idealizes the rule of law, it seems bad policy to rely on mere judgment, however seasoned.

This is why a faith in objectivity tends to be associated with political democracy, or at least with systems in which bureaucratic actors are highly vulnerable to outsiders.⁷ The capacity to yield predictions or policy recommendations that seem to be vindicated by subsequent experience doubtless counts in favor of a method or procedure, but quantitative estimates sometimes are given considerable weight even when nobody defends their validity with real conviction.⁸ The appeal of numbers is especially compelling to bureaucratic officials who lack the mandate of a popular election, or divine right. Arbitrariness and bias are the most usual grounds upon which such officials are criticized. A decision made by the numbers (or by explicit rules of some other sort) has at least the appearance of being fair and impersonal. Scientific objectivity thus provides an answer to a moral demand for impartiality and fairness. Quantification is a way of making decisions without seeming to decide. Objectivity lends authority to officials who have very little of their own.

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