

Cambridge University Press

978-0-521-77268-6 - Making Social Science Matter: Why Social Inquiry Fails and How it can Succeed Again

Bent Flyvbjerg

Excerpt

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# 1 The Science Wars: a way out

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Plato is dear to me, but dearer still is truth.

*Aristotle*

## Physics envy and pre-Kantian shamans

When the May 1996 issue of the journal *Social Text* appeared, an issue devoted to the understanding of “Science Wars,” the editors became targets in these “wars” in ways they had not imagined. The issue included a bogus article by New York University mathematical physicist Alan Sokal, who feigned an earnest reflection on the political and philosophical implications of recent physics research for cultural studies.<sup>1</sup> Sokal revealed the hoax himself, and it immediately became a hotly debated issue in academic and popular media around the world.<sup>2</sup> The appearance of the article was not only taken as a sign of shoddy scholarship by the *Social Text* editors but as an exposé of cultural studies and social science in general. For instance, Nobel prize-winning physicist Steven Weinberg used the hoax to identify what he calls a fundamental “opposition” between natural and social scientists, especially regarding what Weinberg sees as dangerous anti-rationalism and relativism in social science and cultural studies.<sup>3</sup> Those on the other side of the “wars” countered by criticizing Sokal and calling Weinberg and like-minded natural scientists “pre-Kantian shaman[s]” repeating the “mantras of particle physicists,” with their “reductionist view of science.”<sup>4</sup>

The year before Sokal’s hoax, the “wars” had raged over the scientific status of a high-profile US National Opinion Research Center study, which had been launched as a “definitive survey” of sexual practices in the United States.<sup>5</sup> Here, too, doubts were raised not only about the status of scholarship of the study in question, but of sociology and social science as such. The study had received the doubtful honor of becoming the topic of an editorial in *The Economist* under the heading “74.6% of Sociology is Bunk.”<sup>6</sup> In *The New York Review of Books*, Harvard biologist and statistician R. C. Lewontin criticized the researchers behind the

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## 2 Making social science matter

study for believing what people said when filling in the survey questionnaires on which the study builds. “It is frightening,” Lewontin wrote, “to think that social science is in the hands of professionals who are so deaf to human nuance that they believe that people do not lie to themselves [and to others] about the most freighted aspects of their own lives.”<sup>7</sup> Lewontin concluded his review by warning social scientists that in pretending to a kind of knowledge that it cannot achieve, “social science can only engender the scorn of natural scientists.”<sup>8</sup> Other social science critics participating in the debate talked of “dumbed-down” sociology and social scientists’ “physics envy.”<sup>9</sup> The authors of the NORC study responded in kind by calling Lewontin’s review “professionally incompetent” and motivated by an “evident animus against the social sciences in general.”<sup>10</sup> The authors also observed that the notion that an economist or a sociologist should review work in population genetics, one of Lewontin’s fields of competence, “would properly be greeted with derision.”<sup>11</sup> While one might well agree with the latter point, the authors’ use of name-calling instead of substantive arguments in their attempt to refute Lewontin’s criticism, leaves us wondering, not about the validity of this criticism, but about what it is regarding natural and social science that makes it fairly common practice for natural scientists to review social science, whereas the opposite is less common.

**Good or bad?**

However entertaining for bystanders, the mudslinging of the Science Wars is unproductive. The Wars undoubtedly serve political and ideological purposes in the competition for research funds and in defining what Charles Lindblom and Michel Foucault have called society’s “truth politics.”<sup>12</sup> Judged by intellectual standards, however, the Science Wars are misguided. In this book, I will present a way out of the Wars by developing a conception of social science based on a contemporary interpretation of the Aristotelian concept of *phronesis*, variously translated as prudence or practical wisdom. In Aristotle’s words *phronesis* is a “true state, reasoned, and capable of action with regard to things that are good or bad for man.”<sup>13</sup> *Phronesis* goes beyond both analytical, scientific knowledge (*episteme*) and technical knowledge or know-how (*techne*) and involves judgments and decisions made in the manner of a virtuoso social and political actor. I will argue that *phronesis* is commonly involved in social practice, and that therefore attempts to reduce social science and theory either to *episteme* or *techne*, or to comprehend them in those terms, are misguided.

By introducing *phronesis* into the discussion of what social science is

and can be, we will see that Lewontin and others are right, albeit perhaps not for the reasons they believe, when they say that social science has set itself an impossible task when it attempts to emulate natural science and produce explanatory and predictive, that is, epistemic, theory. We will also see, however, that this conclusion does not imply the oft-seen image of impotent social sciences versus potent natural sciences, which is at the core of the Science Wars. This image derives from the fact that both types of science tend to be compared in terms of their epistemic qualities. This book will argue that such a comparison is misleading. The two types of science have their respective strengths and weaknesses along fundamentally different dimensions, a point which Aristotle demonstrated but which has since been forgotten. At present, social science is locked in a fight it cannot hope to win, because it has accepted terms that are self-defeating. We will see that in their role as *phronesis*, the social sciences are strongest where the natural sciences are weakest: just as the social sciences have not contributed much to explanatory and predictive theory, neither have the natural sciences contributed to the reflexive analysis and discussion of values and interests, which is the prerequisite for an enlightened political, economic, and cultural development in any society, and which is at the core of *phronesis*. This should also be the core of social science if we want to transcend the current malaise of the Science Wars.

### Virtue lost

Aristotle, the philosopher of *phronesis* par excellence, never elaborated his conception of *phronesis* to include explicit considerations of power. Hans-Georg Gadamer's authoritative and contemporary conception of *phronesis* also overlooks issues of power.<sup>14</sup> Yet as Richard Bernstein points out, if we are to think about what can be done to the problems and risks of our time, we must advance from the original conception of *phronesis* to one explicitly including power.<sup>15</sup> Unfortunately, Bernstein himself has not integrated his work on *phronesis* with issues of power. Nor, to my knowledge, has anyone else. I will argue that in modern society, conflict and power are phenomena constitutive of social and political inquiry. And I will develop the classic concept of *phronesis* to include issues of power.

Aristotle, in arguing that natural and social science are and should be different ventures, discusses the three intellectual virtues, *episteme*, *techne*, and *phronesis*. Whereas *episteme* is found in the modern words "epistemology" and "epistemic," and *techne* in "technology" and "technical," it is indicative of the degree to which thinking in the social sciences has allowed itself to be colonized by natural and technical science that we today do not even have a word for the one intellectual virtue, *phronesis*,

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## 4 Making social science matter

which Aristotle saw not only as the necessary basis for social and political inquiry, but as the most important of the intellectual virtues. *Phronesis* is most important because it is that activity by which instrumental rationality is balanced by value-rationality, and because such balancing is crucial to the sustained happiness of the citizens in any society, according to Aristotle. In what follows we will redress the imbalance between the intellectual virtues by submitting the concept of *phronesis* to a current reinterpretation in terms of the needs of contemporary social science. The goal is to help restore social science to its classical position as a practical, intellectual activity aimed at clarifying the problems, risks, and possibilities we face as humans and societies, and at contributing to social and political praxis.

**A brief overview**

Based on a critique of cognitivism and naturalism, Part one of the book shows why social science never has been, and probably never will be, able to develop the type of explanatory and predictive theory that is the ideal and hallmark of natural science. Chapter two demonstrates that context and judgment are irreducibly central to understanding human action. On this basis, following works by Hubert Dreyfus, Pierre Bourdieu, and Harold Garfinkel, chapters three and four explore the question of whether a theory of context and judgment is possible. The answer to this question is negative and the conclusion is that social science emulation of natural science is a cul-de-sac; mainstream social theory and social science methodology stand in need of reorientation.

Part two is an attempt at such a reorientation based on *phronesis*. Chapter five introduces Aristotle's original thoughts on the subject and explores the relationship between *phronesis* and social science. The following chapters then develop the concept of *phronesis* on three fronts to make for a more contemporary interpretation. First, chapter six takes its point of departure in Aristotle's insight that case knowledge is crucial to the practice of *phronesis*; on this basis the chapter clarifies the status and uses of case studies in social science. Second, based on works by Michel Foucault, Jürgen Habermas, and Friedrich Nietzsche, chapters seven and eight elaborate the classical conception of *phronesis* to include considerations on power, thus expanding the classical concept from one of values to one of values and power. Third, chapter nine further refines the approach by developing a set of methodological guidelines for doing what I call "phronetic social science." Chapter ten contains illustrations and examples of such an approach, while Chapter eleven sums up the perspective of the book.

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My aims with this book are simply to call attention to a central problem in the social sciences and to outline a possible answer. I see the problem – the fact that the social sciences have not had the type of theoretical and methodological success that the natural sciences have – as fairly well defined and well documented. The answer, however, seems less clear, and I do not think there is a single answer. My own attempt at an answer – phronetic social science – should be considered only one attempt among many possible. It should also be seen as only a first step that will undoubtedly need further theoretical and methodological refinement, just as it will need to be developed through further practical employment in social-science research.<sup>16</sup> Despite such qualifications, I hope the reader will agree that given what is at stake – social sciences that can hold their own in the Science Wars, in the academic community, and in society at large – the attempt at reforming these sciences is worth making.

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*Part one*

Why social science has failed as science

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## 2 Rationality, body, and intuition in human learning

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Our task is to broaden our reasoning to make it capable of grasping what, in ourselves and others, precedes and exceeds reason.

*Maurice Merleau-Ponty*

Context is central to understanding what social science is and can be. This chapter asks, “What role does context play in human knowledge and skills?” Philosophy of science and epistemology typically pose questions such as: “What is knowledge?”; “What can we know?”; “Under what conditions can we know that we know?” Here we will approach the question of knowledge by asking the more dynamic question: “How do people acquire knowledge and skills?” It is by addressing this question that we begin to understand the problem of context.

The intention here is not to outline and analyze all possible ways in which people acquire knowledge and skills, nor shall we review the many schools and theories that exist in this area. Rather we will deal with a single phenomenology of human learning as formulated by Hubert and Stuart Dreyfus.<sup>1</sup> This particular phenomenology has been chosen because it is especially useful for understanding the linkage between knowledge and context, and because it directly addresses the question of whether knowledge about human activity can be context-independent. The answer to this latter question is decisive for an understanding and response to two fundamental epistemological questions in the study of human activity: “Are theory and epistemology possible in social science?” “Can social and political science be scientific in the same sense as is natural science?”

The first part of the chapter reviews the phenomenology of human learning, the so-called Dreyfus model. We will then discuss the model’s implications for social science.

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10 Why social science has failed as science

### **Competence and virtuosity in human learning**

Some years ago in the United States, an experiment was conducted on a group of paramedics. Video films were made of six persons administering cardiopulmonary resuscitation (CPR) to victims of acute heart failure. Five of the six were inexperienced trainees just learning CPR, while the sixth was a paramedic with long experience in emergency life-saving techniques. The films were shown to three groups of subjects: paramedics with practical experience, students being trained in this field, and instructors in life-saving techniques. Each subject was asked the following question: “Who of the six persons shown in the films would you choose to resuscitate you if you were the victim of such an accident?” Among the group of experienced paramedics, 90 percent chose the one experienced paramedic from the films. The students chose “correctly” in only 50 percent of the cases. Finally, and perhaps surprisingly, the instructors in resuscitation had poorer results than either the experienced paramedics or the students, choosing the experienced paramedic in only 30 percent of the cases.<sup>2</sup>

What form of rationality led the instructors to achieve such a poor performance? And what mechanisms lay behind the experienced paramedics’ well-developed ability to choose correctly? These questions will be dealt with in the following discussion.

Detailed phenomenological studies of human learning indicate that people pass through several phases or levels in the learning of skills, where “skills” are understood to range from the technical to the intellectual; e.g., building a house, being socially adept, analyzing a text. Various studies, all after the degree of detail, have divided the learning process into a varying number of such levels. The Dreyfus model operates with five levels in the human-learning process:

- (1) Novice
- (2) Advanced beginner
- (3) Competent performer
- (4) Proficient performer
- (5) Expert

They are levels, say Dreyfus and Dreyfus, because in phenomenological terms they consist of recognizable, qualitatively different ways of acting and performing in the process of learning a given skill. Individuals at a given level do better than individuals at the previous level. Not all people achieve the highest level in a given field. Some fields, such as chess, guitar playing, or surgery, are characterized by only a small fraction of novices becoming experts. In other areas, such as bicycling and driving, a large