Social Science That Matters

Social science is headed down a dead end toward mere scientism, becoming a second-rate version of the hard sciences. We need to recognise and support a different kind of social science research — and so should those who demand accountability from researchers.

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This paper asks what kind of social science we – scholars, policy makers, administrators – should and should not promote in democratic societies, and how we may hold social scientists accountable to deliver what we ask them for.

My argument follows three main steps:

1. We should avoid social sciences that pretend to emulate natural science by producing cumulative and predictive theory. The natural science approach simply does not work in the social sciences. No predictive theories have been arrived at in social science, despite centuries of trying. This approach is a wasteful dead-end.

2. We should promote social sciences that are strong where natural science is weak – that is, in reflexive analysis and deliberation about values and interests aimed at praxis, which are essential to social and economic development in society. We should promote value rationality over epistemic rationality, in order to arrive at social science that matters.

3. Policy makers and administrators should reward such praxis-oriented social science, and they should penalise social science that has no social and practical import, including social science which vainly tries to emulate natural science. This would be accountability that matters.

Two Types of Social Science

Table 1 outlines two models for doing social science, the epistemic and the phronetic models.

• The *epistemic model* finds its ideal in the natural science model for doing science. Here the objective of the social scientist is to discover the theories and laws which govern social action, just as the objective of the natural scientist is to discover the theories and laws which govern natural phenomena. Praxis, according to the natural science model of social science, is social engineering which applies social theories and laws to solve social problems.

A classic simile for this type of social science is the so-called "moon-ghetto metaphor," named for social scientists who argued during the 1960's and 1970's that if natural science and engineering could put a man on the moon, surely social science could solve the social problems of the urban ghetto (Nelson 1977). History proved them wrong.

• The *phronetic model* of social science takes as its point of departure the fact that despite centuries of trying the natural science model still does not work in social science: No predictive social theories have been arrived at as yet. The phronetic model is named after the Aristotelian concept *phronesis,* which is the intellectual virtue used to deliberate about which social actions are good or bad for humans. The basis of deliberation is value rationality instead of epistemic rationality.

At the core of phronetic social science stands the Aristotelian maxim that social issues are best decided by means of the public sphere, not by science. Though imperfect, no better device than public deliberation following the rules of constitutional democracy has been arrived at for settling social issues, so far as human history can show. Social science must therefore play into this device if it is to be useful. This is best done by social scientists: (1) producing reflexive analyses of values and interests and of how values and interests affect different groups in society, and (2) making sure that such analyses are fed into the process of public deliberation and decision making, in order to guarantee that legitimate parties to this process, i.e., citizens and stakeholders, receive due diligence in the process.

To sum up the differences: The epistemic or natural science model sees social scientists and social science professionals as technocrats who – through their insight into social theories and laws – may provide society with solutions to its social ills. The phronetic model sees social scientists and social science professionals as analysts who produce food for thought for the ongoing process of public deliberation, participation, and decision making.

Table 1: Two models for doing social science

	Epistemic Social Science (the natural science model)	Phronetic Social Science (the reflexive model)
Epistemic rationality	Theories and laws of society and social action	----
Praxis	Application of theories and laws to solve social problems, i.e., social engineering (instrumental rationality)	Provision of input for public deliberation and decision making, i.e., democratic due diligence (democratic rationality)
Value rationality	----	Reflexive analysis of values and interests and how they affect different groups in society

Why the Natural Science Model Does Not Work in Social Science

Inspired by the relative success of the natural sciences in using mathematical and statistical modelling to explain and predict natural phenomena, many social scientists have fallen victim to the following *pars pro toto* fallacy: If the social sciences would use mathematical and statistical modelling like the natural sciences, then social sciences, too, would become *truly* scientific.

Often quantitative social scientists see economics as an ideal to follow, because it is the "hardest" and thus seemingly most scientific of the social sciences. Economics has gone furthest with mathematical and statistical modelling, but recently parts of political science and sociology have followed suit under the influence of rational choice and game theory. Commentators talk, for instance, about "economics envy" among political scientists (Stewart 2003).

Such envy is misguided, for not even economics has succeeded in avoiding context (an issue we will consider in detail shortly) and becoming relatively cumulative and stable, like a natural science. Economists have been defined, jokingly but perceptively, as "experts who will know tomorrow why the things they predicted yesterday did not happen today." Furthermore, it seems that the more "scientific" academic economics attempts to become, the less impact academic economists have on practical affairs. As pointed out by Sent (2002) in the *Southern Economic Journal,* Wall Street firms prefer to hire physicists, because they have a real as opposed to fake natural science background. Academic economists had little or no role to play in the final decisions concerning the North American Free Trade Agreement. And though the US spectrum auction of frequency bands for additional cell phone use has been claimed as a victory for game theory, a closer look at the developments reveals that the story is a bit more complex, according to Sent. In short, quantitative social scientists should hestitate before insisting on emulating academic economics.

The underlying issue is that being scient*istic* does not amount to being scient*ific.* Regardless of how much we let mathematical and statistical modelling dominate the social sciences, they are unlikely to become scientific in the natural sciences sense. This is so because the phenomena modelled are social, and thus "answer back" in ways natural phenomena do not. Weinberg (2001: 97), winner of the Nobel Prize in Physics and an astute observer of what makes for success in science, is right when he observes that "it has been an essential element in the success of science to distinguish those problems that are and are not illuminated by taking human beings into account."

A crucial aspect of this distinction resides in the fact that the relevant context of social action is human beings' everyday background skills (Flyvbjerg 2001, chaps. 3-4). These skills are central in deciding what counts as the relevant objects and events whose regularities social theory tries to explain and predict. Context is not simply the singularity of each setting (as in a laboratory), nor the distinctive historical and social paths taken to produce such a setting, even if both may be important to understanding specific social phenomena. Ultimately, the human skills that determine the social context are based on judgments that cannot be understood in terms of concrete features and rules. Therefore a "hard" theory of context in the social sciences is seemingly impossible. But if context decides what counts as relevant objects and events, and if the social context cannot be formalised in terms of features and rules, then social theory cannot be complete and predictive in the manner of much natural science theory, which does not have the problem of self-interpretive objects of study.

One could reasonably ask: If no one can specify judgment in such a way as to produce uniformly accurate predictions, does that mean that more modest and less successful efforts at dealing with judgment are useless, as in, for instance, accounts of bounded rationality? And does it mean that we cannot distinguish better from worse instances of judgment? The answer is no on both counts. Such efforts may be useful. *But they will not be science in the natural science sense.*

The above argument leads to the conclusion that social science is neither "normal" nor "revolutionary" in the Kuhnian sense. Nor is it pre- or post-paradigmatic, as respectively Dreyfus (1991) and Schram (forthcoming) argue, because no paradigmatic phase has preceded the current situation or is likely to follow it. Kuhn's concepts regarding paradigm change, that is, a new paradigm substituting for an older one after a scientific revolution were developed to fit natural science, and they confuse rather than clarify when imported into social science. In my analysis, social science is *non-paradigmatic* and is neither relatively cumulative nor relatively stable. In comparison, although natural science may be neither as rational nor as cumulative as believed earlier, it still shows a type of stability and progress not found in social science. Social scientists who see the natural science model as an ideal to follow sometimes claim that we have simply not yet discovered the various factors or rules that produced outcomes of significance. Appealing to context when arguing that social science can probably never be explanatory and predictive in the manner of natural science is therefore a "cop out," according to this argument, promoted for instance by Laitin (2003: 168).

The argument is easy to counter. So far all attempts to analyse context in social science as merely very complex sets of rules or factors have failed. And if Laitin or other social scientists have found a way around this problem they should rush to publish the evidence, because it would be a real discovery and a sensation. It would open up the possibility, for the first time, that the social sciences could offer the type of theoretical explanation and prediction that today we find only in parts of the natural sciences.

Ferrara (1989: 316, 319) has rightly pointed out that we need a theory of judgment in order to avoid contextualism, that is, the conclusion that validity and truth are context dependent, and that such a theory does not exist as yet. The reason we still lack a theory of judgment, and therefore cannot explain and predict context, is that judgment cannot be brought into a theoretical formula, as shown in Flyvbjerg (2001, chaps. 3-4). When Laitin claims it is a cop out for social scientists to appeal to context in order to explain social phenomena, he accepts the burden of either providing a theory of judgment, or of arguing that Ferrara is wrong in saying we need such a theory in order to avoid appeals to context.

We cannot, in principle, rule out that context, skills, and judgment may be studied in terms of elements which would make social science explanatory and predictive in the manner of natural science (Flyvbjerg 2001: 46-47). But for this to happen we would need a vocabulary in social science which picked out elements of human action that would be completely different from those abstracted from our everyday activities. The elements would have to remain invariant through changes in background practices, in order to qualify as elements in context independent theory. No one has yet found such elements, and the logical possibility that some day they may be discovered has little practical use. This possibility is merely in-principle, and cannot be used to conclude – as the proponents of epistemic social science would have it -- that the social sciences are pre-paradigmatic owing merely to historical coincidence, to social science being young, or to a high degree of complexity in the social world (Dreyfus 1991).

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Phronetic Social Science

The principal objective for phronetic social science is to understand values and interests and how they relate to praxis. The point of departure for this type of social science can be summarised in the following four value-rational questions, which must all be answered for specific, substantive problematics, for instance in management:

(1) Where are we going?
(2) Who gains and who loses, and by which mechanisms of power?
(3) Is this development desirable?
(4) What, if anything, should we do about it?

Social scientists following this approach realise there is no global and unified "we" in relation to which the four questions can be given a final answer. What is a "gain" or a "loss" often depends, crucially, on perspective: My gain may be your loss.

Phronetic social scientists are highly aware of the importance of perspective, and see no neutral ground, no "view from nowhere," for their work. The "we" may be a group of social scientists or, more typically, a group including other actors as well. Phronetic social scientists are well aware that different groups typically have different world views and different interests, and that there exists no general principle by which all differences can be resolved. Thus *phronesis* gives us both a way to analyse relations of power, and to evaluate their results in relation to specific groups and interests.

The four value-rational questions may be addressed, and research developed, using different methodologies. In other words, phronetic social science is *problem-driven*, not methodology-driven. The most important issue is not the individual methodology involved, even if methodological questions may have some significance. It is more important to get the result right – that is, to arrive at social sciences that effectively deal with deliberation, judgment, and praxis in relation to the four value-rational questions, rather than being stranded with social sciences that vainly attempt to emulate natural science at the cost of taking judgment out of the picture.

Asking value-rational questions does not imply a belief in linearity and continuous progress. We know enough about power to understand that progress is often complex, ephemeral, and hard-won, and that setbacks are inevitable. Moreover, no one has enough wisdom and experience to give complete answers to the four questions, including social scientists. What should be expected, however, is that phronetic social scientists will indeed attempt to develop their answers, however incomplete, to the questions. Such answers would be input to ongoing dialogue about the problems, possibilities, and risks we face, and about how things may be done differently.

Focusing on values, phronetic social scientists are forced to face what is perhaps the most basic value-question of all, that of foundationalism versus relativism – that is, the view that there are central values that can be rationally and universally grounded, versus the view that one set of values is as good as another. Phronetic social scientists reject both of these positions and replace them with contextualism or situational ethics. Distancing themselves from foundationalism does not leave phronetic social scientists normless, however. They find their point of departure in their attitude to the situation being studied. They seek to ensure that such an attitude is not based on idiosyncratic morality or personal preferences, but on a common view among a specific reference group to which they refer. For phronetic social scientists, the socially and historically conditioned context – and not the elusive universal grounding that is desired by certain scholars – constitutes the most

effective bulwark against relativism and nihilism. Phronetic social scientists realise that as researchers, their sociality and history is the only solid ground under their feet; and that this socio-historical foundation is fully adequate for their work.

As regards validity, phronetic social science, like any other social science, is based on interpretation and is open for testing in relation to other interpretations and other research. Thus the results of phronetic social science may be confirmed, revised, or rejected according to the most rigorous standards of social science, in relation to other interpretations. This does not mean that one interpretation can be just as good as the next, as relativism would have it, for each interpretation must be based on validity claims. It does mean, however, that phronetic social science will be as prepared to defend its validity claims as any other research.

Phronetic social scientists also oppose the view that any given interpretation lacks value because it is "merely" an interpretation. As emphasised by Nehamas (1985: 63), the key point is the establishment of a *better* option, where "better" is defined according to sets of validity claims. If a new interpretation appears to better explain a given phenomenon, that new interpretation will replace the old one, until it, too, is replaced by a new and even better interpretation. This is typically a continuing process, not one that terminates with "the right answer." Social science and philosophy have not yet identified criteria by which an ultimate interpretation and a final grounding of values and facts can be made.

This work is dialogical in the sense that it incorporates, and, if successful, is incorporated into, a polyphony of voices. No one voice, including that of the researcher, may claim final authority. The goal is to produce input to dialogue and praxis in social affairs, rather than to generate ultimate, unequivocally verified "knowledge". Dialogue is not limited to the relationship between researchers and the people they study, but may include anyone interested in and affected by the subject under study, and may be started by parties besides the researchers.

Thus, phronetic social science explicitly sees itself as *not* having a privileged position from which the final truth can be told and further discussion arrested. We cannot think of an "eye turned in no particular direction," as Nietzsche (1969: 119) says. "There is *only* a perspective seeing, *only* a perspective 'knowing;' and the *more* affects we allow to speak about one thing, the *more* eyes, different eyes, we can use to observe one thing, the more complete will our 'concept' of this thing, our 'objectivity,' be" (emphasis in original). Hence, "objectivity" in phronetic social science is not "contemplation without interest" but employment of "a *variety* of perspectives and affective interpretations in the service of knowledge" (emphasis in original).

It might be feared that the dialogue sought by phronetic social science will easily degenerate into a cacophony in which the loudest voice carries the day. But the significance of any given interpretation will depend on the extent to which its validity claims are accepted in this dialogue, and phronetic social scientists recognise that acceptance typically occurs in competition with other claims. If, on the contrary, the arguments of researchers carry special weight in the dialogue, it would likely derive from their having spent more time on, and being better trained at, establishing validity than other actors.

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We are talking about a difference in degree, not in kind, because other actors could still advance their own claims. To the phronetic researcher, this is the reality of social science, in contrast to researchers who act as if validity claims can and should be given final grounding (and with it, total acceptance). By substituting *phronesis* for *episteme*, phronetic social scientists avoid trying to lift this impossible burden.

A first step in moving towards phronetic social sciences is for social scientists to explicate the different roles of their research. The oft-seen image of impotent social sciences versus potent natural sciences is misleading and derives from their being compared *in terms of their epistemic qualities*. If we instead compare the two types of science in terms of their phronetic qualities we get the opposite result: strong social science and weak natural science. From that perspective, the attempts of social science to become "real", epistemic science draw attention and resources away from those areas where social sciences could make an impact, and toward areas where they do not, never have, and probably never will, obtain any significance as Kuhnian normal and predictive sciences.

One useful task of organisation research practised on the basis of the guidelines presented here is to provide concrete examples and detailed narratives of the ways in which power and values work in organisations and with what consequences, and to suggest how power and values could be changed to work with other consequences. Insofar as organisational situations become clear, they are clarified by detailed stories of who is doing what to whom. Such clarification is a principal concern for phronetic organisation research, which explores current practices and historic circumstances to find avenues to praxis. The task is to identify, and deliberate about, the problems, possibilities, and risks that organisations face, and to outline how things could be done differently – all in full knowledge that we cannot find ultimate answers to these questions, or even a single version of what the questions are.

Conclusions

Two scenarios may be outlined for the future of social science. In the first – and today, dominant – scenario, it is scientism, the belief that science holds a reliable method of reaching the truth about the nature of things, which continues to dominate the social sciences. But scientism in social science will continue to fail, because the reality of social science does not and cannot live up to the ideals of natural science. Consequently, social science will increasingly degenerate as a scholarly activity, and will find it more and more difficult to gain public support and funding for its activities.

The second scenario replaces scientism with *phronesis*. Here the purpose of social science is not to develop epistemic theory, but to contribute to society's practical rationality by elucidating where we are, where we want to go, and what is desirable according to different sets of values and interests. The goal of the phronetic approach becomes contributing to society's capacity for value-rational deliberation and action. The contribution may be a combination of concrete empirical analyses and practical philosophical-ethical considerations – "fieldwork in philosophy," as Pierre Bourdieu called his own version of phronetic social science. In this scenario social scientists actively ensure that their work is relevant to praxis. The aim is to make the line between research and the world direct and consequential.

If we want more *phronesis* in social science, we need to do three things:

• First, we must drop all pretence, however indirect, of emulating the relative success of the natural sciences in producing cumulative and predictive theory, for their approach simply does not work in social science.

• Second, we must address problems that matter to groups in the local, national, and global communities in which we live, and we must do it in ways that matter; we must focus on issues of context, values, and power, as advocated by great social scientists from Aristotle to Machiavelli to Max Weber.

• Finally, we must effectively and dialogically communicate the results of our research to our fellow citizens and carefully listen to their feedback.

If we do this – focus on specific values and interests in the context of particular power relations – we may successfully transform social science into an activity performed *in* public and *for* different publics, sometimes to clarify, sometimes to intervene, sometimes to generate new perspectives, and always to serve as eyes and ears in efforts to understand the present and deliberate about the future. We may, in short, arrive at social science that matters. Policy makers and university administrators should reward this type of praxis-oriented social science and they should penalise social science that has no social and practical impact, including social science which vainly tries to emulate natural science. This would be accountability that matters.

References

Bartky, Sandra Lee (1990). *Femininity and Domination: Studies in the Phenomenology of Oppression.* New York, NY: Routledge.

Brytting, Tomas (2001). *Att Vara Som Gud? Moralisk Kompetens i Arbetslivet.* Malmö: Liber.

Brytting, Tomas, Hans De Geer, Gunilla Silverberg (1997). *Moral i Verksamhet: Ett Etiskt Perspektiv på Företag och Arbete.* Stockholm: Natur och Kultur.

Clegg, Stewart (1989). *Frameworks of Power.* Newbury Park, CA: Sage.

Clegg, Stewart (1997). "Foucault, Power and Organisations," in A. McKinlay and K. Starkey (Eds.) *Foucault, Management and Organisation Theory: From Panopticon to Technologies of Self.* London: Sage, pp: 29-48.

Crush, Jonathan (1994). "Scripting the Compound: Power and Space in the South African Mining Industry," *Environment and Planning D: Society and Space,* 12: 301-324.

Dean, Mitchell (1991). *The Constitution of Poverty: Toward a Genealogy of Liberal Governance.* London: Routledge.

Dean, Mitchell (1999). *Governmentality: Power and Rule in Modern Society.* Thousand Oaks, CA: Sage.

Donzelot, Jacques (1979). *The Policing of Families.* New York: Pantheon.

Dreyfus, Hubert (1991). "Defending the Difference: The Geistes/Naturwissenschaften Distinction Revisited," in Akademie der Wissenschaften zu Berlin, *Einheit der Wissenschaften,* Internationale Kolloquium der Akademie der Wissenschaften zu Berlin, Bonn, 25-27 June 1990. Berlin: Walter de Gruyter.

Ewald, François (1986). *L'Etat providence.* Paris: B. Grasset.

Ewald, François (1996). *Histoire de L'Etat providence: Les Origines de la solidarité.* Paris: Grasset.

Ferrara, Alessandro (1989). "Critical Theory and its Discontents: On Wellmer's Critique of Habermas," *Praxis International* 8: 305-320.

Flyvbjerg, Bent (1998). *Rationality and Power: Democracy in Practice.* Chicago: The University of Chicago Press, 1998.

Flyvbjerg, Bent (2001). *Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again.* Cambridge: Cambridge University Press.

Flyvbjerg, Bent, Nils Bruzelius, and Werner Rothengatter (2003). *Megaprojects and Risk: An Anatomy of Ambition.* Cambridge University Press.

Harcourt, Bernard E. (2001). *Illusion of Order: The False Promise of Broken Windows Policing.* Cambridge, MA: Harvard University Press.

Hardy, Cynthia and Stewart Clegg (1996). "Some Dare Call It Power," in Clegg, Hardy and Nord (Eds.) *Handbook of Organisation Studies.* London: Sage, pp: 622-641.

Johansson, Ulla (1998). *Om Ansvar: Ansvarföreställningar och Deras Betydelse för den Organisatoriska Verkligheten.* Lund: Lund University.

Laitin, David (2003). "The Perestroikan Challenge to Social Science," *Politics and Society,* 31: 163-184.

Latour, Bruno (1996). *Aramis, Or the Love of Technology.* Cambridge, MA: Harvard University Press.

Latour, Bruno (1999). *Pandora's Hope: Essays on the Reality of Science Studies.* Cambridge, MA: Harvard University Press.

Leijon, Svante (1993 Ed.) *God Kommunal Organisation: Lyssning, Tolkning och Handling,* KFi-rapport 22, Göteborg.

Leijon, Svante (1996). *Arbete i Brytningstid: Tankar om Tillvarons Dualiteter,* BAS, Göteborg.

Miller, Peter (1994). "Accounting and Objevtivity: The Invention of Calculating Selves and Calculable Spaces," in A. Megill (Ed.) *Rethinking Objectivity.* Durham: Duke University Press, pp: 239-264.

Miller, Peter (2003). "Management and Accounting," in Theodore M. Porter and Dorothy Ross (Eds.) *The Cambridge History of Science,* vol. 7, *The Modern Social Sciences.* Cambridge: Cambridge University Press, pp: 565-576.

Miller, Peter and Nikolas Rose (1997). "Mobilising the Consumer: Assembling the Subject of Consumption", *Theory, Culture and Society,* 14: 1-36.

Minson, J. (1993). *Questions of Conduct: Sexual Harassment, Citizenship and Government.* London: Macmillan.

Nehamas, Alexander (1985). *Nietzsche: Life as Literature.* Cambridge, MA: Harvard University Press.

Nelson, Richard R. (1977). *The Moon and the Ghetto: An Essay on Public Policy Analysis.* New York: W.W. Norton.

Nietzsche, Friedrich (1969). *On the Genealogy of Morals.* New York: Vintage Books, 1969.

Procacci, Giovanna (1993). *Gouverner la misère: La question sociale en France (1789-1848).* Paris: Éditions du Seuil.

Rabinow, Paul (1989). *French Modern: Norms and Forms of the Social Environment.* Cambridge, MA: MIT Press.

Rabinow, Paul (1996). *Essays on the Anthropology of Reason.* Princeton: Princeton University Press.

Rabinow, Paul (1999). *French DNA: Trouble in Purgatory.* Chicago: The University of Chicago Press.

Rose, Nikolas (1985). *The Psychological Complex: Psychology, Politics and Society in England, 1869-1939.* London: Routledge and Kegan Paul.

Rose, Nikolas (1996). *Inventing Our Selves: Psychology, Power and Personhood.* Cambridge: Cambridge University Press.

Schram, Sanford F. (forthcoming). "Return to Politics: Perestroika, *Phronesis,* and Post-Paradigmatic Political Science." In Sanford F. Schram and Brian Caterino (Eds.) *Making Political Science Matter: The Flyvbjerg Debate and Beyond.* New York: New York University Press.

Sent, Esther-Mirjam (2002). "Review of 'Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again' by Bent Flyvbjerg," *Southern Economic Journal,* 68: 732-734.

Stewart, Sharla A. (2003). "Revolution From Within." *University of Chicago Magazine* 95, no. 5, http://magazine.uchicago.edu/0306/features/index.shtml.

Weinberg, Steven (2001). "What Science Can Explain." *The New York Review of Books,* September 20: 97.