

A Perestroikan Straw Man Answers Back: David Laitin and Phronetic Political Science

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This article addresses three main issues. First, it argues that David Laitin, in his article above, misrepresents Bent Flyvbjerg's book Making Social Science Matter in the extreme. Second, the article argues that Laitin's claim that political science may become normal, predictive science in the natural science sense is unfounded; the claim is a dead end that perestroikans try to get beyond. Finally, the article proposes that political scientists substitute phronesis for episteme and thereby avoid the trap of emulating natural science. By doing so, political scientists may arrive at social science that is strong where natural science is weak: in the reflexive analysis and discussion of values and interests aimed at praxis, which is the prerequisite for an enlightened political, economic, and cultural development in any society.

I am grateful to David Laitin (2003) and Stephen White (2002) for pointing out that my book *Making Social Science Matter* (MSSM; Flyvbjerg 2001) captures many of the core themes in a perestroikan political science. I share the basic intent and argument of perestroikans and would be delighted if the book might help advance Perestroika in political science. However, where White provides a balanced review of the book, in the hands of Laitin I feel like the proverbial straw man.

I will address three main issues in what follows. First, I will show that Laitin misrepresents my work in the extreme. Second, I will assess Laitin's proposed alternative to the methodology he claims I present in MSSM, his tripartite method, and "scientific frame." Third, I will outline what I call phronetic social and political science, a methodology for the analysis of values and interests aimed at praxis.

LAITIN'S MISREPRESENTATIONS

David Laitin's main move in developing both his critique and his alternative is to distort my distinction in MSSM between phronetic and epistemic social science. Laitin equates phronetic disciplines with qualitative and narrative methods, whereas epistemic disciplines have formal modeling and statistics at their core, according to Laitin. He thus invokes the dualisms of qualitative versus quantitative methods, case study research versus large samples, and narrative versus formal modeling. This makes Laitin's job easy in attacking soft political science and promoting his own hard methodology. But the dualisms Laitin calls upon are rhetorical devices that misrepresent what I say in MSSM.

Below I will present a number of examples to document this. For reasons of space, not all examples are included. However, because Laitin's misrepresentations and misuses of MSSM are so far-reaching, I want to refute the most important examples in some detail.

Dominance or Balance for Qualitative Methods?

Laitin states, as one of the main assertions in the abstract to his article,

Bent Flyvbjerg makes the best case for a renewed dominance for qualitative and case study work throughout the social sciences. (Laitin, XXX163).²

In fact, I do not make the case for dominance for qualitative and case study work. I make the case for balance and integration in several highly visible places in MSSM. The following is verbatim what I say about the case study and large samples:

[My assessment of case study research] should not be interpreted as a rejection of research which focuses on large random samples or entire populations; for example, questionnaire surveys. This type of research is essential for the development of social science; for example, in understanding the degree to which certain phenomena are present in a given group or how they vary across cases. The advantage of large samples is breadth, while their problem is one of depth. For the case study, the situation is the reverse. Both approaches are necessary for a sound development of social science. (Flyvbjerg 2001, 87, from the summary of chap. 6 on case study research, “The Power of Example”; see also 75, 79, and 83 for other examples.)

Laitin continues his misrepresentations by criticizing perestroikans for having an “abhorrence of all things mathematical” (XXX163). Following this line of argument he asserts, again mistakenly,

Social scientists, [Flyvbjerg] concludes, should not even try to imitate the scientific method with fancy statistics and impressive regressions. (XXX165)

In MSSM I argue that social science probably cannot become scientific in the natural science sense, but I do not argue against statistics and regressions, as Laitin claims I do. In line with this misrepresentation, Laitin incorrectly presents my research on city politics and planning in Aalborg (Flyvbjerg 1998a)—which I use as an example of phronetic social science in MSSM—as if it were entirely qualitative (Laitin, XXX170-71).³ Here is what I actually write in MSSM:

In answering the question of who wins and who loses in the Aalborg Project, I carried out environmental and social impact audits using statistical and other quantitative analyses. This was necessary for relating process to outcome in the project. Here as elsewhere, the sharp separation often seen in the literature between qualitative and quantitative methods is a spurious one. (Flyvbjerg 2001, 196)

At a more fundamental level, Laitin misrepresents my conception of *phronesis* and narrative. Laitin (XXX165, XXX169, XXX175) writes that I see *phronesis* as narrative.

This is false as is the following conclusion:

Flyvbjerg's attempt to separate out *phronesis* (as a kind of narrative) from its statistical and formal complements is radically incomplete. (Laitin, XXX175)

Compare this with what I actually write about *phronesis* and quantitative methods in MSSM:

In my interpretation, phronetic social science is opposed to an either/or and stands for a both/and on the question of qualitative versus quantitative methods. Phronetic social science is problem-driven and not methodology-driven, in the sense that it employs those methods which for a given problematic best help answer the four value-rational questions [which stand at the core of phronetic social science; see below]. More often than not, a combination of qualitative and quantitative methods will do the task and do it best. (Flyvbjerg 2001, 196)

Thus I do not separate *phronesis* from statistics or other social science tools. I argue for their integration. Nor do I see narrative and quantitative methods as opposites or as methods that stand outside each other. I integrate these as well, as documented by my

empirical work, because it makes for better social and political science. In short, there is no factual basis for David Laitin's claim that I make a case for dominance for qualitative and case study work throughout the social sciences.

A Brief Example of Narrative Combining Qualitative and Quantitative Methods

Let me give a brief example of how I work with qualitative and quantitative methods and with narrative. Laitin (XXX170) says that it was my "deep understanding of all backroom deals"—gained through in-depth qualitative research—that helped make planning in Aalborg more democratic. This is incorrect. What triggered change was my relating the backroom deals, once I had uncovered them, with street-level, everyday outcomes—established through statistical and other quantitative analyses. For instance, through statistical analyses of large samples and time-series data on traffic accidents, I established that the backroom deals had transformed a planned and politically approved reduction in traffic accidents of 30-40% into a statistically significant increase in accidents of about the same size.

I then integrated these qualitative and quantitative analyses into one narrative together with legal and ethical considerations on democracy. When published, this narrative created considerable commotion among politicians and the public, because it made it uncomfortably clear that more people were killed and injured in traffic because city officials had allowed the local chamber of industry and commerce an illegitimate influence on planning outcomes during the backroom deals. After this, it became impossible for officials to continue to practice the backroom setup for policy and

planning. In this case it was the *combination* in one narrative of uncovering relations of power through qualitative analyses *and* linking power with outcomes through quantitative studies that helped make for more democracy.

This example is typical of my work and shows I do not conclude against statistics and regressions, as Laitin claims. I see choice of method as dependent on the research problem at hand. Sometimes, quantitative methods will best help answer the problem; sometimes, qualitative methods may do the job alone; and most often—if the problem is of practical-political import and the researchers want to make a difference with their research—a combination of quantitative and qualitative methods will be most effective. MSSM explicitly reflects this position, as does my book *Rationality and Power: Democracy in Practice*, which is my main example of *phronesis* in MSSM. My most recent book, *Megaprojects and Risk: An Anatomy of Ambition*, and many of my articles also make extensive use of both quantitative and qualitative methods. (Flyvbjerg, Bruzelius, and Rothengatter 2003; Flyvbjerg, Holm, and Buhl 2002) If Laitin wanted to criticize a purely qualitative researcher and use this to undermine Perestroika, as seems to have been his strategy, however misguided, he picked the wrong person.

Social versus Natural Science

On the issue of social versus natural science, Laitin misrepresents MSSM like this:

The social world, [Flyvbjerg] argues, is sufficiently different from the natural world that any hopes for a Galilean conquest over the unknown in social science will forever remain unrealized. (Laitin, XXX164)

Compare Laitin's statement with what I actually write and emphasize in MSSM, again in several highly visible places:

It is worth reiterating that [the] plea for the importance of context [to social phenomena] is not an ultimate proof that social science can *never* be explanatory and predictive. It only makes it *probable* that this is so. (Flyvbjerg 2001, 46, emphasis in original; from the first paragraph in the conclusions to chap. 4, "Context Counts"; see also 4, 62, and 76)

Laitin (XXX168) further claims I do not define context in MSSM. In fact I use two chapters (chaps. 3 and 4) to establish that context in social science is human beings' everyday background skills.

And the examples of misrepresentation go on. I will limit myself to only three more brief instances. First, Laitin (XXX170-71) writes that I do not explain the influence of power in Aalborg. In fact, I present a historical explanation in terms of the *longue durée* in *Rationality and Power* similar to the type of explanation Robert Putnam (1993) and his associates use to explain power in Italian local government in *Making Democracy Work*, and I explicitly refer to *Rationality and Power* in MSSM (144-45) for the full story on this. Second, Laitin (XXX168) says I do not provide any philosophy of science cites to

support my claims regarding prediction as a criterion for science. In fact, the cites can be found on pages 38 and 175 in MSSM. Third, Laitin (XXX167) claims I “admit” that Hubert and Stuart Dreyfus used a standard scientific procedure to make a discovery concerning human cognition. Laitin even tries to lend credence to this claim by inserting a bogus endnote referring to where I am supposed to admit this (Laitin, XXX182, note XXX8). The problem for Laitin is that the two sources he quotes as evidence, both of which I authored or coauthored, do not even touch upon this issue, let alone “admit” to it. Moreover, one of the sources is in Danish, and I doubt Laitin has read this. Finally, it was not the Dreyfus brothers who made the discovery Laitin says they did, nor did they conduct the experiment or author the study that reported the experiment, as Laitin (XXX166-67) wrongly claims. Laitin is as mistaken in the details of his article as he is on the larger issues.

Possible Explanations of Laitin’s Misrepresentations

The examples presented above show that Laitin’s misrepresentations regarding MSSM are extensive and concern the core of the book’s argument. The examples document that Laitin has made up facts and results that are not in the book and presented them as if they were. The examples further show that Laitin has changed or omitted other facts and results so the research reported in MSSM is presented in Laitin’s article in a highly inaccurate and biased manner.

Why would Laitin make himself guilty of such misrepresentations? I see two possible explanations; Laitin may have made his misrepresentations in error or

deliberately. First, error would explain the misrepresentations if, for instance, Laitin had not really read MSSM but only sampled it carelessly. If you are a hegemon, as Laitin says he is, and *know* your methodology is correct, you do not have to read critiques carefully, and over time you are likely to develop a tin ear for such critiques. Error would also be a plausible explanation if Laitin had operated with overly simple distinctions in his analysis of MSSM that would make him all too ready to script MSSM and me into the preselected role of narrative, qualitative villain. My problem with this type of explanation is I do not see a serious and experienced scholar make such mistakes. Making errors to a degree that would explain the misrepresentations documented above would imply a recklessness on Laitin's part that would be no less problematic and unethical than deliberate misrepresentation; it would violate basic scholarly canons of reasonable handling of information and debate.

Second, Laitin may have made his misrepresentations deliberately. Laitin claims he has read MSSM and is familiar with its content. If we take this claim at face value, we are led to assume that his misrepresentations are not results of error but are instead committed intentionally. My difficulty with this type of explanation is I do not see an honest scholar getting involved in the type of manipulation and ill will against colleagues that deliberate misrepresentation entails.

Whichever explanation is correct, I do see how Laitin's misrepresentation of MSSM serves his purposes well for discrediting Perestroika and promoting his own methodology as science. In what follows, I will argue, however, that even if Laitin were to succeed in undermining Perestroika and have his way with the "tripartite method" and "scientific frame," this would result in a political science that is no more scientific in the

Kuhnian, natural science sense than perestroikan or other political science. Furthermore, it would result in the type of stagnant social and political science that today relegates social science to the role of loser in the Science Wars. Let us see why.

PROBLEMS WITH LAITIN'S PROPOSED METHODOLOGY

Laitin's tripartite method consists of integrating the well-known techniques of statistics, formal modeling, and narrative in political analyses (Laitin, XXX163, XXX175-79). I agree with Laitin that all three elements can be useful in social science, depending on the questions social scientists want to answer. I also agree that the way Laitin proposes to combine the three elements may add rigor to formal modeling in places where this is currently lacking. I thus welcome Laitin's tripartite method as one way to improve validity in a specific type of social science research.

How Approximate Is Laitin's "Approximation to Science"?

But Laitin's article is unclear regarding what type of science the tripartite method entails. In the context of the tripartite method, Laitin interestingly avoids talking about science as such and instead uses the fuzzy terms "scientific frame" (XXX163, XXX169) and "approximation to science" (XXX181). Does this mean that Laitin believes that the tripartite method will not, after all, produce results that are scientific in the natural science sense, but only an "approximation"? If so, the obvious question is, how approximate? And which factors decide how approximate to science Laitin can get with

his method? After Laitin's bombastic attacks on Perestroika and phronetic political science for not being sufficiently scientific, it is unsatisfactory and inconsistent that he does not answer these questions for his own proposed methodology.

Instead, Laitin leaves his reader with the vague notion of "scientific frame," which, when operationalized, appears to be something as noninnovative and non-controversial as an ad hoc combination of three well-established social science research techniques. When deprived of his falsely based contrast with the phronetic alternative and his claim to hegemony for his own methodology, Laitin's scientific frame is so weak as to lack any real persuasiveness.

Laitin (XXX176) says he sees narrative as a co-equal to the formal and statistical elements of the tripartite method. But he immediately contradicts himself by identifying three roles for narrative that subordinate and define this approach in relation to formal and statistical methods. Narrative, according to Laitin (XXX176-79), should be used for, first, plausibility tests of formal game theoretic models; second, linking independent and dependent variables in statistical analyses; and third, analyses of residual variance in statistical models. I agree with Laitin that these three uses of narrative can be helpful in social science. I disagree that the three roles exhaust the work narrative can and should do. The history and philosophy of social science do not support Laitin in his narrow view of narrative. Were we to use narrative only in the ways Laitin proposes and refrain from all other uses, then a host of useful social science knowledge could no longer be produced or supported, including some of the most treasured classics.

Does Laitin Have a Theory of Context and Judgment?

In presenting his case for formal modeling and statistics, Laitin appears to fall victim to a *pars pro toto* fallacy: if social science would use mathematical and statistical modeling like natural science, social science, too, would become scientific. But being scientific does not amount to being scientific. Regardless of how much we let mathematical and statistical modeling dominate social and political science they are unlikely to become science in the natural science sense. This is so because the phenomena modeled are social and political and thus “answer back” in ways natural phenomena do not.

Here context enters the picture. As mentioned above, I argue in MSSM that in social science the relevant context to social and political action is human beings’ everyday background skills. Thus I do not see context as simply the singularity of each setting or as the distinctive historical and social paths taken to produce such a setting, even if both may be important to understand specific social and political phenomena. I further argue that background skills are central in deciding what counts as the relevant objects and events whose regularities social and political theory try to explain and predict. I finally argue that human skills are based on judgment that cannot be understood in terms of features and rules. Therefore, a “hard” theory of context is seemingly impossible. But if context decides what counts as relevant objects and events and if context cannot be formalized 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 with self-interpretive objects of study.

This leads me to conclude that social science is neither “normal” nor “revolutionary” in the Kuhnian sense. Nor is it pre-or post-paradigmatic as, respectively, Hubert

Dreyfus (1991) and Sanford Schram (2003) argue, because no paradigmatic phase has preceded the current situation or is likely to follow. Kuhn's concepts regarding paradigms were developed to fit natural science, and they confuse rather than clarify when imported into social science. In my analysis, social science is *nonparadigmatic* and is neither relatively cumulative nor relatively stable. In comparison, although natural science may not be as rational nor as cumulative as believed earlier, it still shows a type of stability and progress not found in social science.

Many quantitative political scientists see economics as an ideal to follow because it is the hardest and thus seemingly most scientific of the social sciences. Commentators talk about "economics envy" among political scientists (Stewart 2003). Such envy is misguided, for not even economics has succeeded in avoiding context and becoming cumulative and stable, as I argue in MSSM. 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. This is a main complaint of Perestroika's companion movement in economics, The Post-autistic Economics Network (2004). As pointed out by Esther-Mirjam Sent (2002), Wall Street firms prefer to hire physicists because they have a real as opposed to fake natural science background. Academic economists have had little to no role to play in the final decisions concerning the North American Free Trade Agreement. And though the spectrum auction 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. Quantitative political scientists should make pause before insisting on emulating academic economics.

Against my argument that social science cannot avoid context, Laitin claims that appealing to context is merely to say that we have not yet discovered the various factors or the interaction of factors 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 Laitin (XXX168).

To this I reply that so far, all attempts have failed to analyze context in social science as merely very complex sets of rules or factors. And I wonder whether Laitin has found a way around this problem as he seems to indicate. If he has, he should publish the evidence, because this would be a real discovery and would, indeed, open up the possibility that social science could have the type of theoretical explanation and prediction that today we find only in parts of natural science.

The political philosopher Alessandro Ferrara (1989) has rightly pointed out that we need a theory of judgment in order to avoid contextualism and that such a theory does not exist as yet. In MSSM I argue that the reason we still lack a theory of judgment, and therefore cannot bring closure to context, is that judgment cannot be brought into a theoretical formula. When Laitin says that appealing to context is a cop out, he invites the burden of proof either to provide a theory of judgment or to argue that Ferrara is wrong in saying we need such a theory in order to avoid appeals to context.

In MSSM (46-47) I further argue that we cannot, in principle, rule out that context, skills, and judgment may be studied in terms of elements that would make social science explanatory and predictive in the manner of natural science. But for this to

happen we would need a vocabulary in social science that picked out elements that would be completely different than those abstracted from our everyday activities. The elements would have to remain invariant through changes in background practices. 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 that the social sciences are preparadigmatic owing to historical coincidence, to social science being young, or to a high degree of complexity in the social world (Dreyfus 1991).

One could reasonably ask, that 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; they will have to rely on validity claims of the kind described below in the section on phronetic political science.

Thus Laitin appears to be wrong when he claims we can have a successful science of context and of political and other social behavior. To demonstrate he is right, Laitin would, in my analysis, need to lift the burden of either providing a theory of judgment or an argument that such a theory is not needed to avoid appeals to context.

Laitin's Leap of Faith

As an aside, given Laitin's strong endorsement of statistics as part of his method, I was surprised to see he shows limited understanding of what one can and cannot do with statistics. It's a general tenet of statistics that one cannot infer causally from statistical pattern to individual outcome. Only propensities, or expectations, can be given. Thus Laitin (XXX173) goes further than statistics supports when in his exemplification of the tripartite model he argues that statistical models open the possibility that oppressive Sinhalese language laws in Sri Lanka might have ameliorated violence rather than exacerbated it. The statistical models Laitin refers to do not, and logically cannot, explain the individual case of the Sinhalese language laws. They can only give predictions, useful before the results are known. In several places Laitin (XXX173-74, XXX175) goes too far in implying that a negative causality exists between levels of linguistic grievance and levels of violence, where only negative correlation has been documented. In sum, it seems Laitin does not fully appreciate that statistics is useful for giving stochastic predictions and general tendencies, not reasons.

Laitin (XXX179-80) ends his article by stating that over time we must expect certain fields within social science to become defunct, certain debates to die, and certain methods to become antiquated. Again I agree with Laitin, but he ignores the possibility that this might also apply to his scientific frame and tripartite method. When Laitin (XXX180, emphasis added) indiscriminately asks "that *we all* work inside a scientific frame" and encourages us to ignore "alternate methodology," he is placing the scientific frame outside of the open-minded, skeptical ethos of the scientific ideal he claims to speak for. This is not consistent, in my analysis.

Laitin here makes a peculiar leap of faith for one approach over others. And it is a leap into thin air that “we all” better not take, if my argument above is correct that the scientific frame, understood as the “approximation” to natural science that Laitin (XXX181) appears to endorse, has no more chance than other types of social science of becoming stable and cumulative.

Thus I do not agree that the tripartite method is or can be a general methodology of social and political science, as Laitin seems to think. Nor will it make social science scientific in the natural science sense any more than existing social science methodology. Finally, the tripartite method is not *phronesis*, as also argued by Schram (2004); *phronesis* is problem-driven, and the simple identity Laitin sets between narrative and *phronesis* is mistaken. We will see below what *phronesis* is beyond Laitin.

David Laitin is mistaken if he thinks Perestroika is about fear among perestroikans of formal and statistical analysis. Perestroika is about fear of domination and stagnation. And Laitin’s article is good evidence that such fear is well founded when he claims hegemony for his proposed methodology. This type of claim confirms the suspicion of many perestroikans that anti-perestroikans are not interested in an open discussion of political science and its potential but instead in promoting a dogmatic version of *the* correct interpretation of what political science is, namely, rational choice theory and statistics. Perestroikans appear to have a sound sense that trouble lies ahead when someone suggests “we all” do the same thing in social science. Perhaps this is because as good social scientists they understand that social systems, including social science, thrive on diversity.

PHRONETIC POLITICAL SCIENCE

Social and political science will remain weak vis-à-vis natural science so long as people insist on comparing both types of science in terms of their epistemic qualities. Such a comparison is misleading, however. The two types of science have their respective strengths and weaknesses along fundamentally different dimensions. 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 in the natural science sense, 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 should be at the core of social science if we want to transcend the malaise of the Science Wars.

What Is Phronesis?

A contemporary interpretation of the Aristotelian concept of *phronesis*, variously translated as prudence or practical wisdom, may effectively help us develop social and political science as reflexive analysis of values and interests aimed at praxis. In Aristotle's (1976, 1140a24-b12, 1144b33-45a11) words, *phronesis* is an intellectual virtue that is "reasoned, and capable of action with regard to things that are good or bad for man." *Phronesis* concerns values and goes beyond analytical, scientific knowledge (*episteme*) and technical knowledge or know-how (*techne*) and it involves judgments and decisions made in the manner of a virtuoso social actor. *Phronesis* is so commonly

involved in political and administrative practices that any attempts to reduce political science to *episteme* or *techne* or to comprehend them in those terms are misguided.

Aristotle was explicit in his regard of *phronesis* as the most important of the three intellectual virtues: *episteme*, *techne*, and *phronesis*. *Phronesis* is most important because it is that activity by which instrumental rationality is balanced by value-rationality, to use the terms of Max Weber, and because, according to Aristotle and Weber, such balancing is crucial to the sustained happiness of the citizens in any society. A curious fact can be observed, however. 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 scientific and instrumental rationality dominate modern thinking and language that we no longer have a word containing a variant of the root term for the one intellectual virtue, *phronesis*, that Aristotle and other founders of the Western tradition saw as a necessary condition of successful social and political organization. We need to redress the imbalance between the intellectual virtues. The goal is to help restore social and political 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.

The term “epistemic science” derives from the intellectual virtue that Aristotle calls *episteme*, which is generally translated as “science” or “scientific knowledge.”¹ Aristotle defines *episteme* in this manner (round parentheses in original, brackets added, here and elsewhere):

[S]cientific knowledge is a demonstrative state, (i.e., a state of mind capable of demonstrating what it knows) . . . i.e., a person has scientific knowledge when his belief is conditioned in a certain way, and the first principles are known to him; because if they are not better known to him than the conclusion drawn from them, he will have knowledge only incidentally.— This may serve as a description of scientific knowledge. (Aristotle 1976, 1139b18-36)

Episteme concerns universals and the production of knowledge that is invariable in time and space and achieved with the aid of analytical rationality. *Episteme* corresponds to the modern scientific ideal as expressed in natural science. In Socrates and Plato, and subsequently in the Enlightenment tradition, this scientific ideal became dominant. The ideal has come close to being the only legitimate view of what constitutes genuine science, such that even intellectual activities like political and other social sciences, which are not and probably never can be scientific in the epistemic sense, have found themselves compelled to strive for and legitimate themselves in terms of this Enlightenment ideal. Epistemic political science makes claims to universality and search for generic truths about politics. Epistemic political science is the mainstream of political science.

Whereas *episteme* resembles our ideal modern scientific project, *techne* and *phronesis* denote two contrasting roles of intellectual work. *Techne* can be translated into English as “art” in the sense of “craft”; a craftsperson is also an *artisan*. For Aristotle,

both *techne* and *phronesis* are connected with the concept of truth, as is *episteme*.

Aristotle says the following regarding *techne*:

[S]ince (e.g.) building is an art [*techne*] and is essentially a reasoned productive state, and since there is no art that is not a state of this kind, and no state of this kind that is not an art, it follows that art is the same as a productive state that is truly reasoned. Every art is concerned with bringing something into being, and the practice of an art is the study of how to bring into being something that is capable either of being or of not being. . . . For it is not with things that are or come to be *of necessity* that art is concerned [this is the domain of *episteme*] nor with natural objects (because these have their origin in themselves). . . . Art . . . operate[s] in the sphere of the variable. (Aristotle 1976, 1140a1-23)

Techne is thus craft and art, and as an activity it is concrete, variable, and context dependent. The objective of *techne* is application of technical knowledge and skills according to a pragmatic instrumental rationality, what Michel Foucault (1984, 255) calls “a practical rationality governed by a conscious goal.” Political science practiced as *techne* would be a type of consulting aimed at better politics by means of instrumental rationality, where “better” is defined in terms of the values and goals of those who employ the consultants, sometimes in negotiation with the latter.

Whereas *episteme* concerns theoretical *know why* and *techne* denotes technical *know-how*, *phronesis* emphasizes practical knowledge and practical ethics. *Phronesis* is

often translated as “prudence” or “practical common sense.” Let us again examine what Aristotle has to say:

We may grasp the nature of prudence [*phronesis*] if we consider what sort of people we call prudent. Well, it is thought to be the mark of a prudent man to be able to deliberate rightly about what is good and advantageous. . . . But nobody deliberates about things that are invariable. ...So... prudence cannot be a science or art; not science [*episteme*] because what can be done is a variable (it may be done in different ways, or not done at all), and not art [*techne*] because action and production are generically different. For production aims at an end other than itself; but this is impossible in the case of action, because the end is merely doing *well*. What remains, then, is that it is a true state, reasoned, and capable of action with regard to things that are good or bad for man. ...We consider that this quality belongs to those who understand the management of households or states. (Aristotle 1976, 1140a24-b12, emphasis in original)

The person possessing practical wisdom (*phronimos*) has knowledge of how to manage in each particular circumstance that can never be equated with or reduced to knowledge of general truths about managing. *Phronesis* is a sense or a tacit skill for doing the ethically practical rather than a kind of science. For Plato, rational humans are moved by the cosmic order; for Aristotle they are moved by a sense of the proper order among the ends we pursue. This sense cannot be articulated in terms of theoretical axioms, but is grasped by *phronesis* (Taylor 1989, 125, 148).

One might get the impression in Aristotle's original description of *phronesis* that *phronesis* and the choices it involves are always good. This is not necessarily the case. Choices must be deemed good or bad in relation to certain values and interests in order for good and bad to have meaning. Phronetic political science is concerned with deliberation about such values and interests.

In sum, the three intellectual virtues *episteme*, *techne*, and *phronesis* can be characterized as follows:

Episteme: Scientific knowledge. Universal, invariable, context independent. Based on general analytical rationality. The original concept is known today by the terms "epistemology" and "epistemic." Political science practiced as *episteme* is concerned with uncovering universal truths or laws about politics.

Techne: Craft/art. Pragmatic, variable, context dependent. Oriented toward production. Based on practical instrumental rationality governed by a conscious goal. The original concept appears today in terms such as "technique," "technical," and "technology." Political science practiced as *techne* is consulting aimed at better politics by means of instrumental rationality—a type of social engineering—where "better" is defined in terms of the values and goals of those who employ the consultants, sometimes in negotiation with the latter.

Phronesis: Ethics. Deliberation about values with reference to praxis. Pragmatic, variable, context dependent. Oriented toward action. Based on practical value rationality. The original concept has no analogous contemporary term. Political

science practiced as *phronesis* is concerned with deliberation about (including questioning of) values and interests aimed at praxis.

Aristotle found that every well-functioning society was dependent on the effective functioning of all three intellectual virtues—*episteme*, *techne*, and *phronesis*. At the same time, however, Aristotle (1976, 1144b33-45all) emphasized the crucial importance of *phronesis*, “for the possession of the single virtue of prudence [*phronesis*] will carry with it the possession of them all.”² *Phronesis* is most important, from an Aristotelian point of view, because it is that intellectual virtue that may ensure the ethical employment of science (*episteme*) and technology (*techne*). Because *phronesis* today is marginalized in the intellectual scheme of things, scientific and technological development take place without the ethical checks and balances that Aristotle and, later, Max Weber saw as all important.

Priority of the Particular

Phronesis concerns the analysis of values—“things that are good or bad for humans”—as a point of departure for action. *Phronesis* is that intellectual activity most relevant to praxis. It focuses on what is variable, on that which cannot be encapsulated by universal rules, on specific cases. *Phronesis* requires an interaction between the general and the concrete; it requires consideration, judgment, and choice (Ruderman 1997). More than anything else, *phronesis* requires *experience*. About the importance of specific experience, Aristotle says,

[P]rudence [*phronesis*] is not concerned with universals only; it must also take cognizance of particulars, because it is concerned with conduct, and conduct has its sphere in particular circumstances. That is why some people who do not possess theoretical knowledge are more effective in action (especially if they are experienced) than others who do possess it. For example, suppose that someone knows that light flesh foods are digestible and wholesome, but does not know what kinds are light; he will be less likely to produce health than one who knows that chicken is wholesome. But prudence is practical, and therefore it must have both kinds of knowledge, or especially the latter. (Aristotle 1976, 1141b8-27)

Here, again, Aristotle is stressing that in the practical administration of human affairs (in this case the administration of health, which was a central concern for the ancient Greeks), knowledge of the rules (“light flesh foods are digestible and wholesome”) is inferior to knowledge of real cases (“chicken is wholesome”). Some of the best schools of business administration, like Harvard Business School, have understood the importance of cases over rules and emphasize case-based and practical teaching. The rules are not the game, in business or in politics. Such business schools may be called Aristotelian, whereas schools stressing theory and rules may be called Platonic. We could do with more Aristotelian schools of political science.

Some interpretations of Aristotle’s intellectual virtues leave doubt as to whether *phronesis* and *techne* are distinct categories, or whether *phronesis* is just a higher form of

techne or know-how (Dreyfus and Dreyfus 1990; 1991, 102-7). Aristotle is clear on this point, however. Even if both *phronesis* and *techne* involve skill and judgment, one type of intellectual virtue cannot be reduced to the other; *phronesis* is about value judgment, not about producing things. Similarly, in other parts of the literature one finds attempts at conflating *phronesis* and *episteme* in the sense of making *phronesis* epistemic. But insofar as *phronesis* operates via a practical rationality based on judgment and experience, it can only be made scientific in an epistemic sense through the development of a theory of judgment and experience, as argued above. Aristotle warns us directly against the type of reductionism that conflates *phronesis* and *episteme*.

With his thoughts on the intellectual virtues, Aristotle emphasizes properties of intellectual work, which are central to the production of knowledge in the study of political phenomena. The particular and the situationally dependent are emphasized over the universal and over rules. The concrete and the practical are emphasized over the theoretical (Devereux 1986). It is what Martha Nussbaum (1990, 66) calls the “priority of the particular” in Aristotle’s thinking. Aristotle practices what he preaches by providing a specific example of his argument, viz., light flesh foods versus chicken. He understands the “power of example.” The example concerns the administration of human health and has as its point of departure something both concrete and fundamental concerning human functioning. This is typical of many classical philosophers.

Despite their importance, the concrete, the practical, and the ethical have been neglected by modern science. Today one would be open to ridicule if one sought to support an argument using an example like that of Aristotle’s chicken. The sciences are supposed to concern themselves precisely with the explication of universals, and even if

it is wrong the conventional wisdom is that one cannot generalize from a particular case (Flyvbjerg 2004). Moreover, the ultimate goal of scientific activity is supposedly the production of theory. Aristotle is here clearly anti-Socratic and anti-Platonic. And if modern theoretical science is built upon any body of thought, it is that of Socrates and Plato. We are dealing with a profound disagreement here.

For political scientists it is worth noting that Aristotle links *phronesis* directly with political science:

Political science and prudence [*phronesis*] are the same state of mind [They are not identical, however. *Phronesis* is also found at the level of the household and the individual].. . . Prudence concerning the state has two aspects: one, which is controlling and directive, is legislative science; the other . . . deals with particular circumstances . . . [and] is practical and deliberative. (Aristotle 1976, 1141b8-b27)

Two things should be highlighted here. The first is Aristotle's (1976) assertion that political science, as a consequence of the emphasis on the particular, on context, and on experience, cannot be practiced as *episteme*. To be a knowledgeable researcher in an epistemic sense is not enough when it concerns political science because "although [people] develop ability in geometry and mathematics and become wise in such matters, they are not thought to develop prudence [*phronesis*]" (1142a12-29). Aristotle explains that a well-functioning political science based on *phronesis* is imperative for a well-

functioning society, inasmuch as “it is impossible to secure one’s own good independently of . . . political science” (1141b27-42a12).

Secondly, Aristotle emphasizes in his concept of *phronesis* both the collective (the state) and the particular, rules and circumstance, directives and deliberation, sovereign power and individual power. Since Aristotle, however, an unfortunate division has developed in philosophy and in the social and political sciences, of two separate traditions, each representing one of the two sides stressed by Aristotle. One tradition, the dominant one, has developed from Plato via Hobbes and Kant to Jürgen Habermas and other rationalist thinkers, emphasizing the first of the two sides, that is, rules and rational control. The other, partly Aristotelian and partly sophist in origin, has developed via Machiavelli to Nietzsche, and to Michel Foucault in some interpretations, emphasizing particular circumstances and practical deliberation. Today the two traditions tend to live separate lives, apart from occasional, typically rhetorical attacks from thinkers within one tradition on thinkers within the other. Aristotle insisted, however, that what is interesting, for understanding and for praxis, is what happens where the two now largely separate sides intersect—where rules meet particular circumstance—and that this point of intersection is the locus of appropriate phronetic political science.

Power and Phronesis

Aristotle never elaborated his conception of *phronesis* to include explicit considerations of power. Hans-Georg Gadamer’s (1975) authoritative and contemporary conception of *phronesis* also overlooks issues of power. Yet, as Richard Bernstein (1989, 217) has

pointed out, if we are to think about what can be done to the problems, possibilities, and risks of our time, we must advance from the original conception of *phronesis* to one explicitly including power. Unfortunately, Bernstein himself has not integrated his work on *phronesis* with issues of power. But conflict and power are phenomena constitutive of modern social and political inquiry. Thus social and political science can only be complete if they deal with issues of power. I have therefore made an attempt to develop the classic concept of *phronesis* to a more contemporary one, which accounts for power, by tracing the Aristotelian roots in the thinking of Machiavelli, Nietzsche, and Foucault (Flyvbjerg 2001, chaps. 7 and 8).

Besides focusing on values—“what is good and bad for humans,” which is the classical Aristotelian focus—a contemporary reading of *phronesis* must also pose questions about power and outcomes:

“Who gains, and who loses?”

“Through what kinds of power relations?”

“What possibilities are available to change existing power relations?”

“Is it desirable to do so?”

“What are the power relations among those who ask the questions?”

Phronetic political science poses these questions with the intention of avoiding the voluntarism and idealism typical of so much ethical thinking. The main question is not only the Weberian “Who governs?” posed by Robert Dahl and most other students of power. It is also the Nietzschean question: What “governmental rationalities” are at work

when those who govern govern? With these questions and with the classical focus on values, phronetic political scientists relate explicitly to a primary context of values and power. Combining the best of a Nietzschean-Foucauldian interpretation of power with the best of a Weberian-Dahlian one, the analysis of power is guided by a conception of power that can be characterized by six features:

1. Power is seen as productive and positive, and not only as restrictive and negative.
2. Power is viewed as a dense net of omnipresent relations, and not only as being localized in “centers” and institutions, or as an entity one can “possess.”
3. The concept of power is seen as ultra dynamic; power is not merely something one appropriates, it is also something one reappropriates and exercises in a constant back-and-forth movement within the relationships of strength, tactics, and strategies inside of which one exists.
4. Knowledge and power, truth and power, rationality and power are analytically inseparable from each other; power produces knowledge, and knowledge produces power.
5. The central question is *how* power is exercised, and not merely *who* has power, and *why* they have it; the focus is on process in addition to structure.
6. Power is studied with a point of departure in small questions, “flat and empirical,” not only, nor even primarily, with a point of departure in “big questions” (Foucault 1982, 217). God is in the detail, as far as power is concerned.

Analyses of political and administrative power following this format cannot be equated with a general analytics of every possible power relation in politics and administration. Other approaches and other interpretations are possible. The format can, however, serve as a possible and productive point of departure for dealing with questions of power in doing contemporary *phronesis*.

Core Questions of Phronetic Political Science

The principal objective for a phronetic political science is to perform analyses and derive interpretations of the status of values and interests in politics and administration aimed at praxis. The point of departure for contemporary phronetic research can be summarized in the following four value-rational questions, which must be answered for specific, substantive problematics:

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?

Examples of substantive problematics could be politics for peace in the Middle East, fair elections in the United States, livable downtowns, or fewer toxins in drinking water.

Phronetic political scientists realize there is no global and unified “we” in relation to which the four questions can be given a final answer. What is a “gain” and a “loss” often depend on the perspective taken, and one person’s gain may be another’s loss. Phronetic

political 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 political scientists or, more typically, a group including other political actors as well. Phronetic political 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 analyze relations of power and evaluate their results in relation to specific groups and interests.

The four value-rational questions may be addressed, and research developed, using different methodology. As said, *phronesis* is problem-driven, not methodology-driven. Thus 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—to arrive at social and political sciences that effectively deal with deliberation, judgment, and praxis in relation to the four value-rational questions, rather than being stranded with social and political sciences that vainly attempt to emulate natural science.

Asking value-rational questions does not imply a belief in linearity and continuous progress. The phronetic political scientist knows enough about power to understand that progress is often complex, ephemeral, and hard won and that setbacks are an inevitable part of political and administrative life. It should also be stressed that no one has enough wisdom and experience to give complete answers to the four questions, whatever those answers might be. Such wisdom and experience should not be expected from political scientists, who are on average probably no more astute or ethical than anyone else. What should be expected, however, is attempts from phronetic political

scientists to develop their partial answers to the questions. Such answers would be input to the ongoing dialogue about the problems, possibilities, and risks that politics face and how things may be done differently.

Focusing on values, phronetic political scientists are forced to face the perhaps 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 political scientists reject both of these positions and replace them with contextualism or situational ethics.

Distancing themselves from foundationalism does not leave phronetic political scientists normless, however. They take 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 the political scientists refer. For phronetic political scientists, the socially and historically conditioned context—and not the universal grounding that is desired by certain scholars, but not yet achieved, constitutes the most effective bulwark against relativism and nihilism. Phronetic political scientists realize that as researchers their sociality and history is the only foundation they have, the only solid ground under their feet; and that this socio-historical foundation is fully adequate for their work as political scientists.

As regards validity, phronetic political 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 political science may be confirmed, revised, or rejected according to the most rigorous standards of social science and such results are

open for testing in relation to other interpretations. This does not mean that one interpretation can be just as good as the next, which would be the case for relativism, for each interpretation must be based on validity claims. It does mean, however, that phronetic political science will be as prepared to defend such claims as any other research. Phronetic political scientists also oppose the view that any one among a number of interpretations lacks value because it is “merely” an interpretation. As emphasized by Alexander 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 yet better interpretation. This is typically a continuing process, not one that terminates with “the right answer.” Such is the procedure that a community of political scientists would follow in working together to put certain interpretations of political life ahead of others. The procedure does not describe an interpretive or relativistic approach. Rather, it sets forth the basic ground rules for any social and political inquiry, inasmuch as 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.

Phronetic Research Is Dialogical

Phronetic political science is dialogical in the sense that it incorporates, and, if successful, is itself incorporated into, a polyphony of voices, with no one voice, including that of the researcher, claiming final authority. The goal of phronetic political science is to produce

input to the ongoing dialogue and praxis in politics and administration, rather than to generate ultimate, unequivocally verified knowledge about the nature of these phenomena. This goal accords with Aristotle's maxim that in questions of praxis, one ought to trust more in the public sphere than in science. Dialogue is not limited to the relationship between researchers and the people they study. The relevant dialogue for a particular piece of research typically involves more than these two parties—in principle anyone interested in and affected by the subject under study. Such parties may be dialoguing independently of researchers until the latter make a successful attempt at entering into the dialogue with their research. In other instances there may be no ongoing dialogue initially, the dialogue being sparked by the work of phronetic researchers.

Thus, phronetic political 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) 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” (119, §3.12, emphasis in original). Hence, “objectivity” in phronetic political science is not “contemplation without interest” but employment of “a *variety* of perspectives and affective interpretations in the service of knowledge” (119, §3.12, emphasis in original; see also Nietzsche 1968, 287, §530).

The significance of any given interpretation in a dialogue will depend on the extent to which the validity claims of the interpreter are accepted, and this acceptance typically occurs in competition with other validity claims and other interpretations. The

discourses in which the results of phronetic political science are used have, in this sense, no special status, but are subordinated to the same conditions as any other dialogical discourse. If and when the arguments of researchers carry special weight it would likely derive not from researchers having access to a special type of validity claim, but from researchers having spent more time on and being better trained at establishing validity than have other actors. We are talking about a difference in degree, not in kind. To the phronetic researcher, this is the reality of social and political science, although some researchers act as if validity claims can and should be given final grounding. The burden of proof is on them. By substituting *phronesis* for *episteme*, phronetic political scientists avoid this burden, impossible as it seems to lift.

Some people may fear that the dialogue at the center of phronetic political science, rather than evolving into the desired polyphony of voices, will all too easily degenerate into a shouting match, a cacophony of voices, in which the loudest carries the day. In phronetic political science, the means of prevention is no different from that of other research: only to the extent that the validity claims of phronetic political scientists are accepted will the results of their research be accepted in the dialogue. Phronetic political scientists thus recognize a human privilege and a basic condition: meaningful dialogue in context. “Dialogue” comes from the Greek *dialogos*, where *dia* means “between” and *logos* means “reason.” In contrast to the analytical and instrumental rationality, which lie at the cores of both *episteme* and *techne*, the practical rationality of *phronesis* is based on a socially conditioned, intersubjective “between-reason.”

Examples of Phronetic Political Science

A first step in moving towards phronetic social and political sciences is for social and political scientists to explicate the different roles of their research as *episteme*, *techne*, and *phronesis*. Today, social and political scientists seldom clarify which of these three roles they are practicing. The entire enterprise is simply called “science” or “research,” even though we are dealing with quite different activities. It is often the case that these activities are rationalized as *episteme*, even though they are actually *techne* or *phronesis*. As argued previously, it is not in their role of *episteme* that one can argue for the value of social and political science. Nevertheless, by emphasizing the three roles, and especially by reintroducing *phronesis*, we see there are other possibilities. The oft-seen image of impotent social sciences versus potent natural sciences is misleading and derives, as mentioned, 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. The importance of *phronesis* renders the attempts of social and political science to become “real” epistemic science doubly unfortunate; such efforts draw attention and resources away from those areas where social and political science could make an impact and into areas where they do not obtain, never have obtained, and probably never will obtain any significance as Kuhnian normal and predictive sciences.

The result of phronetic political science is a pragmatically governed interpretation of the studied political and administrative practices. The interpretation does not require the researcher to agree with the other actors’ everyday understanding; nor does it require the discovery of some deep, inner meaning of the practices. Phronetic political science is

in this way interpretive, but it is neither everyday nor deep hermeneutics. Phronetic political science is also not about, nor does it try to develop, theory or universal method. Thus, phronetic political science is an analytical project, but not a theoretical or methodological one.

The following examples serve as brief representations of an emerging body of political science that contains elements of *phronesis* as interpreted above. It is interesting to note, however, that contemporary political science does not have quite the conspicuous figures doing *phronesis*-like research that we find in other social sciences, for instance sociology with Pierre Bourdieu and Robert Bellah and philosophy and the history of ideas with Michel Foucault and Ian Hacking, among others (see more examples from various fields in Flyvbjerg 2001, 162-65). Even though the thinkers of prudence par excellence, Aristotle and Machiavelli, are central to the intellectual history of political science, today their influence is limited in the discipline. For reasons that must remain unexplored here, the mainstream in contemporary political science does not place at its core the questioning of values and power that was central to classical political science and is central to phronetic political science. Outside the mainstream, however, work is being carried out that shares many of the characteristics of phronetic social science, just as certain works inside the mainstream have phronetic qualities.

Outside the mainstream, we find Wendy Brown (1995), Barbara Cruikshank (1999), Éric Darier (1998), Mitchell Dean and Barry Hindess (1998), François Ewald (1986, 1996), and Hindess (1996). Schram (2004) similarly mentions work by James Scott, Cynthia Enloe, Frances Fox Piven, and Richard A. Cloward and others as examples of Perestroika. Common to these works is a focus on the micropractices of

power, power as seen from the bottom up, instead of political science's conventional focus on sovereign power, that is, power as seen from the top down.

Inside the mainstream, a study like Robert Putnam et al.'s (1993) *Making Democracy Work*, which is presented by the authors as a fairly conventional although exceptionally rigorous work of hypothetico-deductive political science, has turned out to have important phronetic effects regarding our understanding of where we are going with civil society and what to do about it (Flyvbjerg 1998b, 208). With this work—and with *Bowling Alone*, *Better Together*, and the founding of the Saguaro Seminar, which brings together practitioners and scholars to develop actionable ideas to strengthen civil society—Putnam has effectively addressed the four value-rational questions at the core of *phronesis* and linked them with praxis (Putnam 2001, Putnam and Feldstein 2003).

Putnam may be using conventional methods, but he puts them to uses that are highly unconventional, in the sense that few other contemporary political scientists work as attentively with the research/praxis problematic as do Putnam and his associates. This underscores the point made above, that phronetic social science can be practiced in different ways using different methodologies, so long as the four value-rational questions are addressed effectively and the public has use for the answers in their deliberations about praxis.

Examples of phronetic research also exist from more specialized fields such as the politics of policing (Harcourt 2001, Donzelot 1979), poverty and welfare (Dean 1991, Procacci 1993), sexual politics (Bartky 1990, Minson 1993), and the politics of psychology (Rose 1985, 1996). My own attempts at developing phronetic research have been aimed at understanding democracy and its institutions, and especially how power

and rationality interact inside these institutions to shape urban politics and planning (Flyvbjerg 1998a; Flyvbjerg, Bruzelius, and Rothengatter 2003). More examples of relevant research may be found in Dean (1999, 3-5) and Flyvbjerg (2001, 162-65).

A main task of phronetic political science is to provide concrete examples and detailed narratives of the ways in which power and values work in politics and administration and with what consequences, and to suggest how power and values could be changed to work with other consequences. Insofar as political and administrative situations become clear, they are clarified by detailed stories of who is doing what to whom. Such clarification is a principal concern for phronetic political science and provides the main link to praxis.

CONCLUSIONS

Based on the analysis and discussion above, I conclude the following:

- David Laitin misrepresents my work on phronetic social and political science to a degree where he violates basic scholarly canons of reasonable handling of information and debate.
- When deprived of his false contrast with the phronetic alternative and his claim to hegemony, Laitin's proposed tripartite method and scientific frame is a noncontroversial and noninnovative ad hoc combination of three well-known research techniques: statistics, formal analysis, and narrative.

- Laitin's claim that political science may become normal, predictive science in the natural science sense is unfounded. It presupposes a theory of human judgment that no one, so far, has been able to develop. Moreover, it is unlikely that such a theory can be developed, because human judgment appears not to be rule based, whereas theory requires rules.
- If political scientists were to follow Laitin's call for emulating natural science and for hegemony for his tripartite method and scientific frame, this would contribute to the type of stagnation in political science that perestroikans try to get beyond.
- Phronetic political scientists substitute *phronesis* for *episteme* and thereby avoid the trap of emulating natural science. Instead they arrive at social science that is strong where natural science is weak, that is, in the reflexive analysis and discussion of values and interests aimed at praxis, which is the prerequisite for an enlightened political, economic, and cultural development in any society.

Two scenarios may be outlined for the future of social and political science. In the first scenario, scientism, understood as the tendency to believe that science holds a reliable method of reaching the truth about the nature of things, continues to dominate thinking in social and political science. The relative success of natural science inspires this kind of belief. Explanatory and predictive theory is regarded as the pinnacle of scientific endeavor in this scenario. But scientism in social science will continue to fail for the reasons outlined above and fully developed in Flyvbjerg (2001). Consequently, social science will increasingly degenerate as a scholarly activity.

The second scenario replaces scientism with *phronesis*. In this scenario, the purpose of social and political science is not to develop epistemic theory, but to contribute to society's practical rationality in elucidating where we are, in whose interest this is, where we want to go, and what is desirable according to different sets of values and interests. The goal of the phronetic approach becomes one of 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 version of phronetic social science. In this scenario social and political scientists actively ensure that their work be relevant to praxis. The aim is to make the line between research and the world direct and consequential, in order for research to have an impact.

Today, the dominant streak in social and political science continues to evolve along the first scenario, that of scientism. This is clearly David Laitin's setting. But scientism in social science is self-defeating because the reality of social science so evidently does not live up to the ideals of scientism and natural science. Therefore it is the second scenario, that of *phronesis*, which is more fertile, and worth working for, which is what I have tried to do in Flyvbjerg (2001) and my other work.

David Laitin appears to be wrong when he claims epistemic science can be successful in political science if we just get it right, which, according to Laitin, means we would all follow his method. Steven Weinberg (2001, 97), winner of the Nobel Prize in Physics and an astute observer of what makes for success in science, seems 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." As

soon as human beings are taken into account, human skills and human judgment enter the picture, and the possibility of epistemic science appears to take leave. Phronetic science is still an option, however. This is an option a natural scientist like Weinberg does not, and needs not, consider in the role as natural scientist.³ But it is something to which social scientists should pay close attention if they want success in what they do. On this background, it is encouraging to see that a growing number of political scientists are endorsing Perestroika with its challenge to the dominance of scientism in political science and its support for *phronesis*-like approaches.

If we want more *phronesis* in social and political science, we need to do three things. First, we must drop all pretence, however indirect, at emulating the relative success of the natural sciences in producing cumulative and predictive theory, for their approach simply does not work in social and political 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 and political science into an activity performed in public for social and political publics, sometimes to clarify, sometimes to intervene, sometimes to generate new perspectives, and always to serve as eyes and ears in ongoing efforts to understand the present and deliberate about the future. We may, in short, arrive at social and political sciences that matter.

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NOTES

¹ In the short space of this chapter, it is not possible to provide a full account of Aristotle's considerations about the intellectual virtues of *episteme*, *techne*, and *phronesis*. Instead, I have focused upon the bare essentials. A complete account would further elaborate the relations between *episteme*, *techne*, and *phronesis* and the relationship of all three to *empeiria*. It would also expand on the relationship of phronetic judgments to rules, on what it means to succeed or to fail in the exercise of *phronesis*, and on the conditions that must be fulfilled if *phronesis* is to be acquired. For further discussion of these questions and of the implications of Aristotle's thinking for contemporary social science, see my discussion with Hubert Dreyfus and Stuart Dreyfus in Dreyfus and Dreyfus (1991: 101ff.). See also Bernstein (1985), Heller (1990), Lord and O'Connor (1991eds.), MacIntyre (1984), and Taylor (1995).

² For Aristotle, man [*sic*] has a double identity. For the "human person," that is, man in politics and ethics, *phronesis* is the most important intellectual virtue. Insofar as man can transcend the purely human, contemplation assumes the highest place. Aristotle (1976, 1145a6ff., 1177a12ff.).

³ Natural scientists may well consider, and be practitioners of, *phronesis*, if they take on the role of what has been called "concerned scientists," that is, scientists with a concern for the effects of science on, for instance, nuclear, biological, environmental, and social risks. The Danish physicist Niels Bohr was an early example of a scientist of this type, as was Albert Einstein.