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Political Science and Fundamental Research

by
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In my Presidential Address to the Public Choice Society in 1997 (Munger 2000), I challenged my audience, claiming that the fundamental human problem is not currently being addressed in any coherent way by the social sciences.

While this claim may be too strong, I stand by it. I also claimed then, and believe now, that political science is the only discipline capable of addressing the “fundamental human problem”:

How can a society construct, or preserve, institutions that make self-interested individual action not inconsistent with the welfare of others?

Obviously, there are two ways to go about tackling this problem. I will call them the “Madisonian” and “Rousseauian” approaches, although in fact the basic logic of each approach antedates either of these thinkers.

Madisonian Approach: Take self-interest as fixed and exogenous, and engineer institutions to achieve a coincidence of individual goals and group welfare.

Rousseauian Approach: Fix institutions in a “just” manner, and influence what people perceive to be their self-interest, so that individual and group goals are the same.

I should be clear: I am hardly the first, by a long shot, to make the distinction above. Adam Smith ([1759]1991; [1776]1994) was among the first to recognize clearly the potential for inconsistency between self-interested behavior and the collective good, but we have made considerable progress since then. Riker (1982) made a slightly different distinction, but one very much in this spirit. Douglass North (1982, 1990) doesn’t use these names, but clearly recognizes that these two approaches to organizing a society are both important and mutually dependent. Axelrod and Keohane (1986), Heiner (1983), and Schofield (1985) have argued that the performance of institutions can be judged by almost exactly the standard I have stated. Not everyone I have mentioned is a political scientist,

but all are doing “political science” because they are addressing the fundamental question.

From lists such as this, it may be tempting to conclude that the best political science is imported from other social science disciplines, especially economics. And that may be true for some parts of the discipline, because political science is eclectic. But, in terms of the centrality of the study of institutions and the relation of institutions to personal beliefs and codes of action, political science is and always has been far out in front.

The reason is that we also study justice, both in terms of arguments and beliefs. Many scholars who study political theory are addressing the problem of persuasion and the power of moral or prescriptive arguments. This focus goes back thousands of years. All I am trying to point out is that both aspects of the fundamental problem, the design of institutions on the one hand and the process of socialization or persuasion about “the Good” on the other, are important. Consequently, of all the social sciences, political science is best suited (maybe uniquely suited) to address the fundamental human problem in a coherent way.

In what follows I argue that political science research has brought about a transformation in the way we think about the fundamental human problem. I begin by providing a framework for thinking about this problem. From this framework, I conclude that solving the problem requires work on five basic research agendas, which have to be conducted in parallel. I then describe examples of progress made in each of the five areas. In my closing remarks I discuss the implications of current trends in political science for the future of the discipline and its ability to address important social problems.

The Problem and Its Solution: The Right Questions

Here is what we have to do: We must match models of aggregation and interaction of many people with verisimilar

representations of cognition for individuals. Other social science disciplines have many advantages over those of us in political science in one or the other part of this problem. Economists and game theorists have extraordinarily powerful tools for looking at the aggregations of individual actions. Psychologists and historians specialize in helping us understand the thoughts and actions of individuals. But political science is the only social science discipline with even an aspiration for synthesis. More simply, no one else has a chance to get the right answers, because no one else is asking the right questions.

Fortunately, I happen to know the right questions! The division of labor into the “Madisonian” (institutional design) and “Rousseauian” (ethical theories of justice) perspectives is disappearing in political science. The outlines of an integrated research agenda are starting to emerge. It is useful to divide this agenda into five analytically distinct, but clearly related issues.

1. What are *Preferences*?
2. What are feasible *Alternatives*?
3. How much does the form of *Implementation* affect the way alternatives are valued?
4. How do alternatives chosen *Today* affect the *Menu* of alternatives available in the *Future*?
5. What is *the Good*? How would we know if some processes, and some outcomes, are better than others?

I will very briefly elaborate on each of these questions.

Preferences

“Preference” is the way people value actions and things. Some preferences are relatively fixed, like taste (“Vanilla is better than chocolate”). Others are based on notions of causal relations. If I prefer particular outcomes, but only get choices about policies, I may change my mind if I get new information about how well a policy works (Downs 1957; Hinich and Munger 1994). For example, if I value safety from external aggression, should I favor purchase of more A-10 “Wart Hog” tank-killer aircraft for the U.S. Air Force? I don’t know! But the reason I don’t know is not that I don’t have preferences. Rather, I don’t know because I don’t have enough information.

Those who study political science from a rational choice perspective will start from the assumption that preferences are rational, meaning complete and transitive. Transitivity is plausible as an axiom, but assuming completeness in most realistic policy contexts is risible. Since information is incomplete or unreliable, the set of preference comparisons over pairs of alternatives may likewise be incomplete or unreliable.

Significant progress has been made in the past 15 years on the study of information and political science, including the exciting and provocative research by Austen-Smith (1990), Banks (1991), Calvert (1985), and others on signals and

the rational structure of transmission of information about beliefs. Most recently, Lupia and McCubbins (1998) have gone to the very heart of the matter, following a question raised most clearly in McKelvey and Ordeshook (1986): Given what a democratic system is supposed to accomplish, just what information is required and how can voters obtain it?

As rational choice theorists have started to consider information from this perspective, the more established research agendas of political psychologists have moved toward a synthesis. Though the approach is very different, Zaller’s (1992) path-breaking work on public opinion offers a theoretical model of learning and information use that rational choice theorists can easily appreciate. Lodge, Steenbergen, and Brau (1995) modeled the information use of voters that allows the consideration of economizing on the costs of gathering information without the full completeness axiom once considered necessary to “do” formal models of politics.

If we begin to think in terms of preferences, the relaxation of the restrictive assumptions of the past is not that big a leap. We just need to realize that questions about how information affects beliefs, preferences, and actions are the questions that we are trying to answer.

Alternatives

If preferences are how we evaluate things, alternatives are the things themselves. The key insight of rational choice theory has been that the alternatives available to us are endogenous, derived from the incentives facing strategic actors. Alternatives are choices from the perspective of elites or agenda-controllers, but alternatives are constraints from the perspective of the mass public. More simply, voters cannot decide what alternatives are offered, but can choose only among those offered. The constraints that determine what is feasible can take the traditional forms of technology, or income, or resources, of course. But constraints can also take more interesting and dynamic forms, over and above the constraints imposed by technology and elite-level strategic action. More and more, political scientists working in a variety of subfields have come to recognize that the most important constraints on alternatives may be the limits of human cognition. That is, the very process we use to consider alternatives, or rule them out, is what most affects our choice set in ways that we are only beginning to understand.

For years, the study of constraints was ruled out by an implicit choice. It was common among students of mass-level political behavior, in particular, to take alternatives as given or exogenous. This simplification allowed behaviorists to focus on measuring and predicting the reactions of subjects to stimuli. Yet, it has been perfectly clear, at least since Downs (1957) and Black (1958), that this is only a first step. The reason is that the question of preference, by itself, is not important. Unless we have an integrated model, whose users aspire

to make statements about both what choices are available in equilibrium and how people react, even a set of correct statements about observed “choices” may be useless or even misleading. More simply, what good is it to understand choice without understanding constraints?

The filtering of alternatives through institutions of aggregation imposes constraint on the process, just as surely as income constrains the consumer. But we have not always recognized that this is the question we are asking. In a classic political science article, Converse (1964) argued that mass choices are *not* constrained. To be fair, given his definition of “constraint” (internal logical consistencies in patterns of preferences), this seems perfectly correct.

The challenge to the Converseian orthodoxy is quite recent. This seems astonishing: *Of course* voters’ choices are constrained, because of the restrictions on alternatives! A moment’s reflection surely indicates that convergence to the median, or a process of selection through primaries conducted by parties, are different forms of dynamic constraints. The constraint is external, but the constraint determines choice, given preferences.

On the other hand, rational choice theorists have until recently been reluctant to pay much attention to the equally real constraints on cognition and information processing that psychologists have known about for decades. In the past 10 years, as scholars from a wide variety of fields have accepted both the strategic and cognitive constraints as important, political science has begun to make progress on a broad front, in a way not seen since the 1960s (see, e.g., Alvarez 1997; Iyengar 1991; Jones 1995; Lupia 1994).

Implementation

One thing that has become clear in the past two decades is that giving orders is different from getting results. Further, the difference may be hard to predict unless one has a good theory of incentives and compliance. Transactions costs, agency costs, moral hazard, adverse selection: All these concepts have been developed to help us understand the potential difference between the alternative we think we have chosen and the alternative we actually get.

In the past two decades there has been an idea-driven change in the conception, and practice, of public management in the advanced democracies. Students of public administration (see, e.g., Kettl 1997) believe that the reform movement in practical government and administration would be unrecognizable to practitioners of public administration in 1970, or even in 1980. The synthesis of rational choice theories of bureaucracy and humanistic theories such as “total quality management” has proved to be a vital and persuasive approach to transforming the practice of bureaucratic organization.

There are two very different forms of the new managerialism. First, in New Zealand and the United

Kingdom, there appears to have been a “*make the managers manage*” initiative, based on the notion that traditional (i.e., hierarchical) bureaucracy has grown inert and unresponsive. New Zealand, in particular,

has undergone a truly fundamental transformation in bureaucratic organization and incentives, largely because policymakers have taken seriously the admonitions of public choice theorists.

In contrast, Australia and Sweden have implemented a very different set of reforms based on a “*let the managers manage*” philosophy in the past decade.

Proponents of this reform

take as their core precept the belief that managers know the best ways to provide services, but confused and inconsistent regulations and procedures raise impediments. Managers should be directed toward the problems to be solved and then given considerable flexibility in choosing among solutions and forming organizations that can adapt to changes over time or differences in local circumstances. Clearly, this approach is rather more in conflict with traditional public choice approaches. Which of these approaches is really better? We don’t know yet, and we may not know for a while, but these changes came about because political scientists have ideas that matter.

Today’s Choices, Tomorrow’s Alternatives

By making choices today, a person or a society may determine the choices available next week, or next year. More specifically, choices to forego consumption today may lead to a wider range of alternatives tomorrow. Think what a radical concept “saving” really is. Put yourself in the place of a member of a primitive society, on the brink of starvation during a hard winter: Why not eat the seed corn? Arriving at the simple answer--“Because we will need these seeds to plant in the spring”-- is a mental leap of awesome proportions. It would seem that this ability to plan, to abstract from current needs and “save” for the future, is the contribution of human cognition and mental power.

Such a conclusion is false, of course. All creatures have to solve this problem. The human problem may be more complex, but only because it has a voluntary component. We trade off current consumption against future consumption consciously, while insects, fish, birds, and mammals do it out of instinct.

Why? How? Consider the lesson in what Christians call the Old Testament: “Go to the ant, O sluggard, study her ways and learn wisdom; for though she has no chief, no commander or ruler, she procures her food in the summer, stores up her provisions in the harvest” (Prov. 6:6-8). This is a powerful lesson. The present

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and the future are linked, whether we recognize it or not. Yet, though the ant can't possibly "recognize" the need to save, it does it immediately and unquestioningly. Ants don't live long enough to enjoy the future the stored supplies will ensure, and they are responding to instinct, not direction. Yet, we point our children toward this lesson and remind ourselves, when we raise the ant to a higher moral position than that "sluggard," the wastrel grasshopper.

Adam Smith describes human nature as if people were ants, or wanted to be ants.

The principle which prompts to expense, is the passion for present enjoyment; which, though sometimes violent and very difficult to be restrained, is in general only momentary and occasional. But the principle which prompts to save, is the desire of bettering our condition, a desire which, though generally calm and dispassionate, comes with us from the womb, and never leaves us till we go into the grave. In the whole interval which separates those two moments, there is scarce perhaps a single instant in which any man is so perfectly and completely satisfied with his situation, as to be without any wish of alteration or improvement of any kind. An augmentation of fortune is the means by which the greater part of men propose and wish to better their condition. It is the means most vulgar and the most obvious; and the most likely way of augmenting their fortune, is to save and accumulate some part of what they acquire, either regularly and annually, or upon some extraordinary occasions. (1994, 372)

Is this right? Are humans, by their nature, apt to save and accumulate? Perhaps, but the manner and amount of accumulation is clearly conditioned on the incentives they face, and their expectations about the future.

Today, of course, there are many ways of connecting present choices to future constraints on alternatives. Futures markets allow buyers and sellers to lay off risk; loans allow present consumption based on the expectation of future income. What should we do about people who guess wrong? How can political science address the problem of designing institutions that encourage planning for the future, when many electoral incentives appear to direct us toward next year, or next month, as the effective time horizon?

The Good

In many ways the nature of justice, or "the Good," is the most fundamental question a society faces. Until recently, there were two disjoint approaches to studying and understanding the Good: the philosophical or ethical approach and the axiomatic approach. Most research in "formal" political theory has taken the axiomatic perspective, following Arrow (1963). But this is a difficult path, and has been rightly criticized as often missing the point. Suppose some polity asks a public choice theorist, "How should we decide things collectively?" The answer may be dismissive: "Arrow showed there is no good way to aggregate preferences, so you should give up!" This may explain why very few public choice scholars are hired as consultants.

What Arrow, and those who have extended his work, have actually shown is that every means of aggregating preferences (in the face of disagreement) has some drawbacks. That is very different from saying no one should try. Using the Arrow theorem as a bludgeon against those who want to defend collective decisions really has more of a prescriptive or normative, rather than scientific, basis: Many public choice scholars don't think much of governments and coercive force as a way of "deciding." There is nothing wrong with this perspective, but its defenders should recognize that they are making a normative argument. This is a problem that is simultaneously extraordinarily important and poorly understood. How can we possibly justify a pat, cop-out response like "Arrow says that it is impossible"?

To be fair, there have been a number of critics in the public choice tradition who have argued forcefully that we must come to grips with the Good in methods of choosing and the nature of outcomes. The most consistent defender of this perspective is James Buchanan, both on his own (e.g., Buchanan 1954, 1962, 1966, 1975a, 1975b) and in coauthored work (Brennan and Buchanan 1985; Buchanan and Tullock 1962). Along a slightly different line of argument, public choice scholars have argued that the mechanisms for collective choice available to governments are actually somewhat more robust than a naïve view of Arrow's result would indicate (see, e.g., Tullock 1967).

A wholly new (and at the same time very old) research program has sprung up in the past 10 years, debating the merits of the collective decision hypothesis (CDH). As Burt Monroe (1995) has pointed out, the problem was actually recognized by Aristotle in Book 3, Chapter 11 of *Politics*: "For it is possible that the many, no one of whom taken singly is a sound man, may yet, taken all together, be better than the few, not individually, but collectively." This conjecture is argued intuitively by Rousseau for the existence of a "general will" and by Condorcet in his celebrated "jury theorem."¹

And there's more. Game theorists have begun to produce some very important results in the theory of "fair division." Some exciting recent work (see, e.g., Brams and Taylor 1996, 1999; Young 1994) sets out a research agenda that should keep political scientists busy for decades. Remember how Judith Martin ("Miss Manners") says you should divide a large piece of cake if two people want desert? One person should cut the cake, and then allow the other person to choose which she wants. By construction, the resulting division will be "fair," because it will obey both ethical convention and fulfillment of expectations.

Political philosophers have focused on the quality of arguments for millennia. Making arguments rigorous and evaluating their internal logical consistency is what formal political theorists do best. Political philosophers have often operated in a vacuum, however, debating what is good without being able to tell what is possible. In the past 20 years or so, formal theorists and political philosophers have begun to engage each other. This engagement is really only beginning, but there is lots of exciting work to be done. In particular, there may be

important theoretical logjams clogging advancement on questions of fairness of outcome and process where formal theorists can effect rapid movement.

Final Words

Answering the five questions elaborated here is necessary if societies are ever to solve what I have called the fundamental human problem: How can a society construct, or preserve, institutions that make self-interest not inconsistent with the common good?

An integrated theory is for the first time very nearly within our grasp. As a discipline, political science has made rapid progress in the past two decades. Formal theorists have developed models of aggregation and interaction that tell us whether processes of social choice and the formation and adaptation of beliefs are capable of carrying out the functions required of them in a civil society. Behavioral theorists have developed important new insights into how expectations and beliefs are formed, and how those beliefs adapt, or fail to adapt, when confronted with the aggregated implications of consistency or inconsistency.

The task is to construct a realistic and usable conception of the development of beliefs and opinions that addresses the constraints of human cognition, yet preserves mathematical tractability so that we can consider the

implications of aggregation. If a theory of equilibrium, in the sense of fulfillment of expectations and stability of action, can be united with a theory of cognition, which accurately captures the constraints and characteristics of the human mind, then we will enter a new era.

Last year, I stood in the lobby of a conference hotel talking to my friend Paul Sniderman from Stanford. Paul looked at the people walking by as they talked and hurried to sessions to discuss their research and learn about the work other people were doing. Paul said, "I feel like something has changed. Something has broken loose. We aren't just fighting all time now. We are actually making progress." Then he looked at me and smiled. "Mike, it's a great time to be a political scientist!"

Paul was right. We are on the verge of a genuine advance, a synthesis. For the first time, we are starting to focus on the fundamental human problem and taking some real steps toward solving it. There has never been a better time to be a political scientist. On the other hand, as Aristotle said, *there is never a bad time to be a political scientist!* Ours is the only discipline with a chance to solve the fundamental human problem.

In all sciences and arts the end is a good, and the greatest good and in the highest degree a good is the most authoritative of all--this is the political science of which the good is justice, in other words, the common interest. (Aristotle 1979, III Pt. XII)

Note

1. Rousseau was probably wrong, or at least overly optimistic. Condorcet has since been vindicated by Coleman and Ferejohn (1986), Grofman and Feld (1988), Ladha (1992, 1996), and Ladha and Miller (1996). For a more cautious note, see Austen-Smith and Banks (1996).

References

- Alvarez, Michael. 1997. *Information and Elections*. 1st ed. Ann Arbor: University of Michigan Press.
- Aristotle. 1979. *Politics and Poetics*. Trans. B. Jowett and S.H. Butcher. Norwalk, CT: Easton Press.
- Arrow, Kenneth J. 1963. *Social Choice and Individual Values*. New Haven: Yale University Press.
- Austen-Smith, David. 1990. "Information Transmission in Debate." *American Journal of Political Science* 34(February): 124-52.
- , and Jeffrey Banks. 1996. "Information Aggregation, Rationality, and the Condorcet Jury Theorem." *American Political Science Review* 90(March): 34-45.
- Axelrod, Robert, and Robert Keohane. 1986. "Achieving Cooperation under Anarchy: Strategies and Institutions." In *Cooperation under Anarchy*, ed. Kenneth Oye. Princeton: Princeton University Press.
- Banks, Jeffrey. 1991. *Signaling Games in Political Science*. Chur, Switzerland: Harwood Academic Publishing.
- Black, Duncan. 1958. *The Theory of Committees and Elections*. Cambridge: Cambridge University Press.
- Brams, Steven J., and Alan D. Taylor. 1996. *Fair Division: From Cake-Cutting to Dispute Resolution*. New York: Cambridge University Press.
- , 1999. *The Win-Win solution: Guaranteeing Fair Shares to Everybody*. New York: W.W. Norton.
- Brennan, Geoffrey, and James M. Buchanan. 1985. *The Reason of Rules: Constitutional Political Economy*. New York: Cambridge University Press.
- Buchanan, James M. 1954. "Social Choice, Democracy, and Free Markets." *Journal of Political Economy* 62: 114-23.
- , 1962. "The Relevance of Pareto Optimality." *Journal of Conflict Resolution* 3: 341-54.
- , 1966. "An Individualistic Theory of Political Process." In *Varieties of Political Theory*, ed. David Easton. Englewood Cliffs, NJ: Prentice-Hall.
- , 1975a. *The Limits of Liberty: Between Anarchy and Leviathan*. Chicago: University of Chicago Press.
- , 1975b. "A Contractarian Paradigm for Applying Economic Theory." *American Economic Review* 65: 225-30.
- , and Gordon Tullock. 1962. *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Ann Arbor: University of Michigan Press.
- Brennan, Geoffrey, and James M. Buchanan. 1985. *The Reason of Rules: Constitutional Political Economy*. New York: Cambridge University Press.
- Calvert, Randall. 1985. "The Value of Biased Information: A Rational Choice Model of Political Advice." *American Journal of Political Science* 37(August): 799-833.
- Coleman, James, and John Ferejohn. 1986. "Democracy and Social Choice." *Ethics* 97:6-25.
- Converse, Phillip. 1964. "The Nature of Mass Belief Systems." In *Ideology and Its Discontents*, ed. David Apter. New York: Free Press.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper and Row.

- Grofman, Bernard, and Scott Feld. 1988. "Rousseau's General Will: A Condorcetian Perspective." *American Political Science Review* 82(June): 567-76.
- Heiner, Ronald. 1983. "On the Origins of Predictable Behavior." *American Economic Review* 73:560-95.
- Hinich, Melvin, and Michael Munger. 1994. *Ideology and the Theory of Political Choice*. Ann Arbor: University of Michigan Press.
- Iyengar, Shanto. 1991. *Is Anyone Responsible? How Television Frames Political Issues*. Chicago: University of Chicago Press.
- Jones, Bryan. 1995. *Reconceiving Democratic Decision-Making*. Chicago: University of Chicago Press.
- Kettl, Donald. 1997. "The Global Revolution in Public Management: Driving Themes, Missing Links." *Journal of Policy Management and Management* 16(Summer): 446-62.
- Ladha, Krishna. 1992. "The Condorcet Jury Theorem, Free Speech, and Correlated Votes." *American Journal of Political Science* 36(August): 617-34.
- , 1996. "Hypothesis Testing and the Jury Theorem." In *Collective Decision Making: Social Choice and Political Economy*, ed. Norman Schofield. Boston: Kluwer Academic.
- , and Gary Miller. 1996. "Political Discourse, Factions, and the General Will: Correlated Voting and Condorcet's Jury Theorem." In *Collective Decision Making: Social Choice and Political Economy*, ed. Norman Schofield. Boston: Kluwer Academic.
- Lodge, Milton, Marco Steenbergen, and Shawn Brau. 1995. "The Responsive Voter: Campaign Information and the Dynamics of Candidate Evaluation." *American Political Science Review* 89(June): 309-26.
- Lupia, Arthur. 1994. "Shortcuts versus Encyclopedias: Information and Voting Behavior in California Insurance Reform Elections." *American Political Science Review* 88(March): 63-76.
- , and Mathew McCubbins. 1998. *The Democratic Dilemma: Can Citizens Learn What They Need to Know?* New York: Cambridge University Press.
- McKelvey, Richard, and Peter Ordeshook. 1986. "Information, Electoral Equilibria, and the Democratic Ideal." *Journal of Politics* 8:909-937.
- Monroe, Burt. 1995. "Fully Proportional Representation." *American Political Science Review* 89(December): 925-40.
- Munger, Michael. 2000. "Five Questions: An Integrated Agenda for Public Choice." *Public Choice* (in press).
- North, Douglass. 1982. *Structure and Change in Economic History*. New York: W. W. Norton and Company.
- , 1990. *Institutions, Institutional Change, and Economic Performance*. New York: Cambridge University Press.
- Riker, William. 1982. *Liberalism Against Populism: A Confrontation Between the Theory of Democracy and the Theory of Social Choice*. San Francisco: Freeman.
- Schofield, Norman. 1985. "Anarchy, Altruism, and Cooperation: A Review." *Social Choice and Welfare* 2(2): 207-19.
- Smith, Adam. [1759]1991. *The Theory of Moral Sentiments*. Indianapolis: Liberty Fund Press.
- , [1776]1994. *An Inquiry into the Nature and Causes of the Wealth of Nations*. New York: Modern Library.
- Tullock, Gordon. 1967. "The General Irrelevance of the General Impossibility Theorem." *Quarterly Journal of Economics* 81: 256-70.
- Young, H. Peyton, 1994. *Equity: In Theory and Practice*. Princeton: Princeton University Press.
- Zaller, John. 1992. *The Nature and Origins of Public Opinion*. New York: Cambridge University Press.