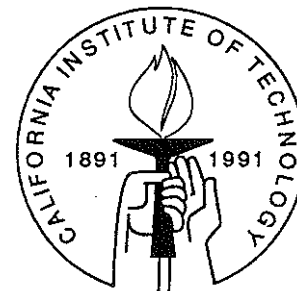


DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA 91125

Politics, Economics, and Politics Again

William R. Keech
California Institute of Technology
The University of North Carolina at Chapel Hill



SOCIAL SCIENCE WORKING PAPER 767

June 1991

Politics, Economics, and Politics Again*

William R. Keech

California Institute of Technology
The University of North Carolina at Chapel Hill

Presidential Address
to the Southern Political Science Association

Colony Square Hotel
Atlanta, Georgia
November 9, 1990

Abstract

This essay reconsiders the meaning of politics. It argues that economics offers theory and language that can contribute to the understanding and fulfillment of political life by facilitating analysis of the public interest. However, economics does not provide an escape from political disagreement, whether based on inevitable differences of interest or of belief, or on self-serving efforts to advance one cause at the expense of another. As a language of discourse, economics is shown to be compatible with a broader conception of human nature than is sometimes claimed by its practitioners or acknowledged by its critics.

*I would like to acknowledge the helpful observations and suggestions of Henry Chappell, Robert Gallman, Robert Grafstein, Ruth Grant, Stephen Leonard, William Mitchell, Christopher Nelson, Paul Quirk, Glendon Schubert, Kenneth Shepsle, and Juerg Steiner. The National Science Foundation has supported my efforts to learn economics and to use it in political analysis.

If asked to define the subject of our discipline, many of us would respond almost instinctively with David Easton's venerable capsule that politics is "the authoritative allocation of values" (1953, pp. 129-134). Others might think of Harold Lasswell's "Politics: Who Gets What, When, How". I would like to suggest that both of these rather similar conceptions are too narrow, not very informative, and perhaps even misleading.

Easton's definition is "taxonomic". That is, it identifies politics in terms of "a restricted set of properties shared by all events describable as political". In fact, politics has been recognized for some time as a cluster concept, "extending to a heterogeneous range of events loosely linked in a 'family resemblance' way" (Frohock 1978, p. 859).¹ Clearly the term "politics" as we appropriately use it is too protean to lend itself to taxonomic definition. As such, it is like freedom, justice, equality, and the public interest, in that it is used in ordinary discourse in many different ways. No single definition will be satisfactory.

In ordinary discourse, the term politics often has a negative connotation. When someone says "well, that's politics", or "it was a political decision", this is rarely an expression of approval. However, our discipline is built on a tradition extending from Aristotle through Mill to Barber, Mansbridge, and Pateman that sees political life as one of the loftiest expressions of the human spirit.

Even when both the positive and the negative connotations are recognized at once, politics is often seen as subjective and indeterminate. Consider the following:

politics is an imponderable, a constantly and unpredictably shifting mixture of forces of the most diverse nature, comprehending acts of great moral virtue (the emancipation of slaves) and of the most vulgar venality (the congressman feathering his own nest).

This quote is from a famous article by George Stigler (1971), a Nobel Prize winning economist. It is a view that he meant to discredit and improve upon, because it characterizes the political process as defying rational explanation. The contrasting view he presents is as follows:

We assume that political systems are rationally devised and rationally employed, which is to say that they are appropriate instruments for the fulfillment of desires of members of the society (1988, p. 210).

Stigler proposes the development of a "rational theory of political behavior" that would develop the "basic logic of political life" with the application of economic reasoning, and enable us to make more sensible reforms.

Since 1971, when his article was written, there has been a steady stream of activity by political scientists and economists that is very much in the spirit of his exhortation. There has been considerable progress towards a rational theory of political behavior.² My understanding of politics has been a major beneficiary of this work. However, I will suggest here that both of

Stigler's characterizations of politics may be partially correct, including the one he discredited as well as the one he endorsed.

**Politics in Economics I:
Conceptualizing the Public Interest.**

There are two kinds of negative images of politics noted above: vulgar and venal on the one hand, and defying rational explanation on the other. The latter is one step away from irrational. Insofar as political life is vulgar, venal, and irrational, it is hardly surprising that it has a bad name. The effort to apply economic reasoning to politics has much contrasting appeal, if only to get the politics out of political life, at least in the negative sense of the term.

The appeals of economic reasoning for political science include rigor, precision, and the absence of the vagueness that often characterizes political concepts, many of which are cluster concepts like politics itself. Moreover, economics offers theory about the aggregation of individual choices into collective decisions, and about the consequences of individual and collective choices. Still more important for my purposes is the fact that economics offers theory that relates these consequences to conceptions of collective well-being.

This last point is politically relevant, not because it involves an "authoritative allocation of values", but because collective well-being is similar to the public interest, the common good, or the general welfare. These concepts have been elements of political discussion for ages. In the high tide of positivism in political science, they were denigrated as meaningless. Glendon Schubert, for example, argued that there is no public interest theory worthy of the name, and that the concept itself makes no operational sense (1962, pp. 175-176). This assessment implied that the concept of the public interest was not worthy of further scientific or scholarly discussion.

I disagree. A political science without objective ways to talk about the public interest is arid and narrow. It may be scientific, but it is not fully political. And economics, in spite of its own positivism, offers powerful theory about the public interest and meaningful ways to make such ideas concrete and subject to systematic analysis. This fact should be an important part of its appeal to students of politics. Economics has done more than our discipline or any other to make an explicit link between individual behavior and clear conceptions of collective, or public well-being. We should make use of these ideas. Political science cannot afford to concede authority on such concepts to economists.

I will present two major examples of economic theory that make this link. The first, general equilibrium theory, is a theory of an automatic, self-equilibrating system. Within its own terms, an economy characterized by general equilibrium needs no central political direction or

guidance. The second example, the theory of macroeconomic policy, is in that respect the opposite. This is in its essence a theory about central direction, guidance or control. It is a system that distills politics into the choice of the goals towards which the system is to be guided.

Both examples are analytical systems that identify the systematic consequences of choices. General equilibrium theory identifies the consequences of the aggregation of countless private choices, while the theory of economic policy identifies the consequences of centralized choices of the settings of policy instruments. Both are ways of considering the public interest.

General equilibrium theory.

Economics characteristically begins with a presumption that people are rationally self-interested, and moves from there to the most elaborate and impressive theory in the social sciences. Perhaps the greatest achievement of economics is to demonstrate that there can be a systematic connection between individual selfishness and collective well-being.

Perhaps the most intuitively plausible idea is that individual selfishness would lead to collective outcomes that are inferior to other alternatives that might be achieved with less selfishness. This idea is captured by the prisoner's dilemma game, which has received its most careful and in depth analysis in the last thirty years, though the recognition of the problem goes back to Hobbes and to Aristotle.

The central insight of economics is the basically less intuitive possibility that individual selfishness might systematically lead to collective well-being. (It is a mark of the success of economics that this idea is now considered intuitive.) The insight goes back at least to Adam Smith's metaphor of the invisible hand, and its modern manifestation is general equilibrium theory. As Arrow and Hahn (1971) describe it, this theory is the culmination of

the notion that a social system moved by independent actions in pursuit of different values is consistent with a final coherent state of balance, and one in which the final outcomes may be quite different from those intended by the agents.

Such a notion, they say,

is surely the most important intellectual contribution that economic thought has made to the general understanding of social processes. (Arrow and Hahn, 1971, p. 1).

I agree.

General equilibrium theory shows that competitive markets can not only achieve such a counterintuitive state, but also that the result can be desirable by a clear standard. Under clearly specified conditions, the result will be optimal, or efficient, by Pareto standards. That is, there will be no other outcome that can make any person better off without making someone else worse

off. This is a way of defining and operationalizing the common good, and relating it to individual preferences and decisions.

If anyone is not impressed with this intellectual achievement, I suggest that they review some of the steps that were taken between 1776, when Smith's Wealth of Nations was published, and the 1970s, when the demonstrations of the existence, uniqueness, and properties of competitive equilibrium were completed.³

General equilibrium theory has few direct policy implications, though it is often taken to be a rationale for limited government. It does depend on some institutional features such as rules regarding property rights and the enforcement of contracts. Still, it is a theory of the public interest in which the optimum is reached through a process of decentralized coordination and without central direction or control.

The theory of economic policy.

The next theory I consider not only has very direct policy implications, it is in its essence a theory of central policy and control, as its name makes clear. The theory of economic policy is a formal representation of the Keynesian idea that policy instruments under the control of the government, such as those of fiscal and monetary policy, may be manipulated in order to change the values of target variables such as unemployment or inflation rates.⁴

In this theory, the target variables are the link to the public interest. A formulation of goals with respect to income growth, inflation and unemployment can be thought of as a "social welfare function" to be maximized, or a "policy loss function" to be minimized. In either case, there is a conceptualization of goals regarding economic performance that is meant to be a representation of what is good for the public. An explicitly formulated social welfare function permits a precise evaluation of the tradeoffs between conflicting objectives, and a precise statement of the relative valuation of present and future outcomes. The source or the authority of such welfare functions is often problematic, but the point for our purposes is that they are a concrete way of conceptualizing and operationalizing the common good.

In many versions, it has been assumed that the macroeconomy is not an automatic, self-equilibrating system. The rationale for policy might be that the state or path of the economy is not satisfactory, and that it needs direction or "medicine", as was the case for the famous tax cut of 1964 (Okun 1971, p. 43). Or the rationale might be that there is a need to respond to exogenous, stochastic shocks to the economy, such as an increase in the price of oil.

The central idea is that the complex inter-relationships of a nation's economy can be represented by a structural model, i.e. a system of equations, or, for the layman, a "black box". A

complete version of such a model would represent markets for labor, for goods, and for financial services, and the connections between them. The relationship between a fiscal or monetary policy choice and a desired change in inflation or unemployment would be defined by the model of the economy. The technology might range from the back of an envelope to mathematical solutions to an econometrically estimated feedback control system. There are analogies to the systems used for sending rockets into outer space, and to the system used for controlling temperature in this building.⁵

This theory of economic policy would seem to be near the ultimate in achievement in making the public policy process scientific. Goals that are meant to identify the public interest would be set through a political process, or perhaps identified by wise and benevolent authorities resembling economists, but the theory of economic policy would provide an objective, nonpolitical technology for achieving them.

**Politics in Economics II:
Where Reasonable People Disagree.**

To say that economics gives us frameworks for objectively analyzing the public interest is to say that it is political. This is political theory in the sense that Plato and Rawls are political theorists, that is, in the most positive sense. However, I will argue in the next section that economics is political in a less lofty, but still perfectly respectable sense. Economics is a powerful language of discourse that can narrow the scope of diversity in conflicting views of what is in the public interest. However economics provides no escape. Such diversity is inevitable, and it is political.

The two economic theories are impressive efforts to create an understanding of society that is rational and scientific as well as constructive and benevolent. They are examples of theories that might fulfil Professor Stigler's assertion that political systems are "rationally devised and rationally employed ... instruments for the fulfillment of the desires of members of society". However, there are important limitations to both achievements. Economists are among the first of those who identify these limitations.

General equilibrium theory and market failure.

There are questions to be raised about the scientific status of general equilibrium theory. For example, Mark Blaug points out that it is a set of possibility statements without empirical content, and that given the difference between it and the real world, it is inapplicable, rather than

false (1980, ch. 8).⁶ My concern is with another type of problem. Kenneth Arrow, one of the creators of general equilibrium theory, points out that "there is nothing in the process which guarantees that the distribution be just." Indeed, the theory itself shows that the final allocation will depend on the initial distributions of resources. Arrow argues that there is an "irreducible need for a social or collective choice on distribution ... (and) ... a great many other situations in which the replacement of market by collective decision making is necessary or at least desirable" (1974, p. 269).

To make matters worse, this sobering conclusion brings us back to another problem, for which Arrow is much better known to political scientists: the demonstration that no constitution or collective decision procedure can simultaneously satisfy four seemingly innocuous normative conditions (1963). Thus the greatest achievement of microeconomic theory leaves us with clear indications of the normative inadequacy of the optimum it defines. And it leaves us with an "impossibility theorem" about the prospects of designing reasonable constitutions that might assure normative improvement.

There is no basis for expecting to discover objectively optimal procedures that will generate "correct" collective decisions through the aggregation of preferences. This work provides a theoretical explanation for Stigler's observation that political life may involve a constantly shifting mixture of diverse forces, and a reason why such shifting may not yield to equilibrium even when political systems are rationally devised.⁷

There is, however, some encouraging light behind this gloomy assessment. Extensions of the theory of markets have provided a basis for theory about government in the form of a theory of market failure, which identifies conditions under which markets do not achieve desirable outcomes. It provides a systematic rationale for government activity by identifying conditions under which government intervention may be appropriate, even according to a theory of markets. Public officials who are informed by relevant economic theory would know when to intervene in order to provide public goods, limit externalities, regulate monopolies, enforce standards of health and safety, and even redistribute income.

But how do we know that government will do this well? Until recently, economists have been somewhat slow to apply their premise of selfish rationality to public officials as well as economic agents. Government is often treated by economists as a benevolent dictator without incentives to deviate from the objective public good as defined by economic theory. The analogy between a benevolent dictator who thinks like an economist and the philosopher-king who contemplates ideal worlds is not the only similarity between economics and the Republic of Plato.

It is in modelling the incentives and behavior of public officials that political scientists and economists have taken up the challenge Stigler offered above to develop a "rational theory of

politics". This has led to an emerging theory of "government failure" as a counterpart to the theory of market failure. We now recognize that government intervention may not necessarily improve on market failure. Intervention may make the problem worse.⁸

An important agenda for cooperation between political science and economics is to sort out the situations in which government intervention improves or fails to improve market failure, and to understand why. This can be done systematically, but it is hard to avoid making normative and empirical judgments about which reasonable people can disagree. This returns us to the messier world of politics, and the world of choice among imperfect institutions and policies through which collective choices can be made and implemented.

Theories of market failure and government failure do not promise an escape from political disagreements about the implications of microeconomic theory. But they do provide a coherent framework, and a language of discourse in which defenders of markets and advocates of government intervention can debate and understand each other. The use of this framework for achieving common ground does not by any means assure agreement, but it does provide a conceptual basis for intelligible discourse, and possibly for the resolution of disputes.

Some issues of dispute can be translated into empirical questions that might be resolved within the framework, but others remain more fundamental. Like the rest of us, economists differ among themselves in the degree to which they have trust and confidence in markets or in government. They also differ in the degree to which they think actual markets approximate the character of perfect markets. These are matters of belief, and "a belief in the market is as much a value judgment as a belief in the social beneficence of central planning" (Bromley, 1989, p. 103).

But recognition of the importance of beliefs in economic theory should not make us distrust such theory. As Wittgenstein has said, "At the foundation of well-founded belief lies belief that is not founded" (1969, p. 33). Economics is a wonderful example of such a system of well founded beliefs. It is the less well-founded beliefs undergirding this system that makes many political scientists uncomfortable or even hostile, an issue to which I shall return.

The theory of economic policy and the Lucas critique.

Experience has not been kind to the theory of economic policy. After some premature self-congratulation in the 1960s (Heller 1966), economists found in the 1970s that many problems were beyond the control of macroeconomic policy. But the problems were deeper than unanticipated events like the oil price shocks and the disappearance of the simple tradeoff between inflation and unemployment. The field of macroeconomics itself went into "theoretical crisis" (Blanchard and Fischer 1989, pp. 26-27). Nothing did more to generate this crisis than the

"Lucas critique" of the theory of economic policy.

Robert Lucas claimed that the kinds of macroeconomic models I described above "provide no useful information as to the actual consequences of alternative economic policies" (1976, 1981, p. 105; emphasis in original). The reason is that the equations in these models are not truly fundamental. They do not capture invariant properties of behavior, and their parameters are likely to change in response to policy changes. Under the assumptions of what are called "rational expectations" and market clearing, the absence of truly fundamental behavioral knowledge leads to the "policy ineffectiveness proposition". Specifically, any policy that is not a surprise will be neutralized and therefore ineffective. No model of the economy is so fundamental that economic agents will not adjust their behavior to neutralize or nullify an effort to control it.

The only way that policy can be effective is for policymakers "to trick economic agents into behaving in socially preferable ways even though their behavior is not in their own interest" (R.G. Hall, quoted in Sargent and Wallace 1976, p. 176). In effect, Lucas pointed out that macroeconomic policymaking was not decision theory in the sense of a game against nature. Rather, it is a game involving other actors, who may respond strategically rather than passively to policy initiatives.

There is a more general point that this new classical macroeconomic theory indirectly makes. The traditional theory of economic policy is a theory of how central policymakers can make choices that influence human behavior so as to improve collective outcomes. Skeptics who are hostile to social science in general have questioned whether human behavior can be controlled by policymakers who use social science knowledge to improve society. New classical macroeconomic theory is a profound, elaborate, and deep social science theory that comes to much the same conclusion.

New classical macroeconomics is a theoretically coherent and rich demonstration of the general point that humans may resist manipulation even for ostensibly constructive purposes. As such it may provide suggestions that could help us understand why many of our institutional reforms do not have the consequences we expect them to have. Consider budget reform, deficit limits enforced by automatic sequester, campaign finance reform, and presidential nomination reform.

Although new classical macroeconomics argues against activist stabilization policy, it is not without policy implications. The main implication is that policymakers should avoid discretionary responses to economic conditions, and instead follow rules without feedback. A prominent suggestion is a rule for a fixed rate of money growth, regardless of economic conditions.

Not surprisingly, not all economists have embraced new classical rational expectations theory, or the policy ineffectiveness proposition. This is not the place to sort out all of the issues

involved, but this is the place to point out that there is in macroeconomic as well as microeconomic theory disagreement and lively debate about what should be the appropriate public institutions to guide private and public activity towards the common good. Sometimes the disagreement does not get as constructive as debate. Herbert Stein observes:

Although there is much talk about economic policy, there is no debate. People say what they have always believed, or what they find it convenient to say, but there is no confrontation of arguments. There is no effort to find the sources of disagreement, or to reach agreement, perhaps because the participants think that the effort to change minds and reach agreement is hopeless. Talk about economic policy has become only a way of rallying one's troops (1984, p. 324).

Like the issues in microeconomic theory and its implications for government, these disagreements involve differences in beliefs about human behavior, markets and government. Contending versions of macroeconomic theory are well founded systems of belief founded on beliefs that are not well founded. In this regard, macroeconomic theory is also political. It is still searching for a synthesis in a common language of discourse (see Taylor, 1986).

Broadening Languages of Discourse.

I have presented economics as political in two senses. First, I showed that it offers a framework in which we can systematically consider the public interest. Second, I showed that even the self-consciously scientific language of economics is vulnerable to dispute regarding beliefs. As the Stein quote indicated, economists themselves do not always listen to each other or try to reach agreement. Just as legislators and candidates for public office can talk past each other, so can partisans within academic disciplines.

Although I have called attention to disagreements within two fields of economics, there is often more agreement among those identified than between them and most political scientists (see Coughlin, 1989). I would like to narrow a gulf between them and us that is based on some fundamental ideas about human nature. There is a view of the world that is shared by most economists, at least for purposes of going about their academic business.

According to this view, individuals are the basic unit of analysis, and their preferences are exogenous and fixed. This assumption, a belief which is not very well founded, is the Archimedean point on which grand economic theories, i.e. well-founded systems of belief, are grounded. This is a very sound strategy for research and theory-building, and economics as we know it is a testimony to its power. In this section, I would like to bring forward some fundamental observations on the individual, and the nature of preferences. To some extent these

observations are at odds with conventional wisdom in economics, but I prefer to emphasize that they build on that wisdom, and that they provide a basis for a deeper understanding of politics.

Along with most economists, I do not question the premise that the individual should be the basic unit of analysis in the study of economics and political science, but let me remind you that individuals are more complicated than is often implied by their treatment in economic analysis. As Coleman (1990), Elster (1984, 1986), March (1978), Schelling (1984), and others tell us convincingly, the self is not a simple, fixed entity with invariant tastes. We are, rather, complicated mixtures of conflicting desires.

One central feature of this fact is the way that we as individuals relate our present behavior to our desires for our own future well-being. Consider the issues of alcohol and drug abuse, saving for college, losing weight, doing homework, and so on. This complexity of human desires is not so much a threat to economics or rational choice theory as a potential enrichment of it, as several economists recognize (see for example Thaler and Shefrin 1981, Frank 1985, Kuran 1990).

Just as the modelling of the behavior of ordinary humans can be improved by the recognition of this complexity of the self, so can the modelling of the behavior of public officials. The behavior of office seekers can be better understood by seeing it as motivated by policy as well as votes (Chappell and Keech 1986). The behavior of legislators can be better understood by seeing goals as varying within as well as across individuals according to a variety of situational factors (Fenno 1973, Hall 1987).

Political scientists have learned a lot by adopting economic reasoning in modelling elections as interactions among individuals with fixed and exogenously defined preferences (Downs 1957, Enelow and Hinich 1984). However, we would be wise to acknowledge that our public policy preferences are not always so fixed. As Mark Blaug has observed,

decision makers do not try to get what they want; rather they learn to want what they get. Means and ends are indissolubly related (1980; p. 151).

What is desirable for public policy is defined by what we learn is feasible.

Consider the standards for acceptable economic performance. In the 1960s, an inflation rate that was below five percent in the Johnson administration was considered unacceptably high. In 1971, President Nixon reversed his career-long opposition to price controls to deal with inflation of five percent. But after the double digit inflation of the 1970s, the Reagan administration was praised for bringing inflation down to such levels. While our standards for inflation have gone down, those for economic well being have gone up since the Depression. Alt (1979) has shown using British experience that they can go down as well.

In my view there is nothing threatening to economics or political science in recognizing

that human beings are more complex than is sometimes acknowledged in standard models. Nor is there anything threatening to political science in the research strategy of modelling individual preferences as fixed and given in a variety of research settings. Models are to be used, not necessarily to be believed (Theil 1971, p. vi).

William James once wrote that "The man who knows governments most completely is he who troubles himself least about a definition which shall give their essence" (1902, 1958, p. 39). Similarly, having identified politics as a cluster concept, I continue to avoid an attempt at specific, taxonomic definition. Still, it may be useful to call attention to an important feature of political life, which I presume is to be found in a variety of settings, including not only governments, but also academic disciplines such as economics and political science, as well as in churches, organizations, and families.

Politics is, among other things, about the relationship between the individual and the polity, between the self and the collective unit. Political science and economics are each languages of discourse and systems of metaphors that are concerned with this relationship, but these disciplines often move in different directions and without mutual awareness.

Systems of metaphors highlight aspects of reality. A key advantage of economics is its systematic attention to the relationship between individual choices, collective choices, and the common good. But systems of metaphors can hide aspects of reality as well. Lakoff and Johnson argue that

in the area of politics and economics, metaphors matter more, because they constrain our lives. A metaphor in a political or economic system, by virtue of what it hides, can lead to human degradation (1980, p. 236).

Many political scientists resist the advantages of economics as a language of discourse, and there are many reasons for this, not all of them defensible. I believe that one of these reasons is a fear that economic metaphors imply a one dimensional treatment of human beings as consumption machines, and that this is degrading.

Political science has historically been much more sensitive than economics to multiple dimensions of the human condition, and this is a strength we should maintain. However, I have tried to show that economic reasoning is not necessarily limited to the analysis of fixed and exogenous preferences among consumption bundles. And the application of economic reasoning to political life is not incompatible with the quest for individual self-realization and self-respect (see Riker, 1982, especially ch. 1). Political life involves a diversity of interests, values, beliefs, and preferences. These may be compatible or incompatible, reasonable or unreasonable, admirable or reprehensible. They may be selfish or altruistic, shortsighted or farsighted, manifest or latent. As Madison put it in Federalist No. 10, the "latent causes of faction are ... sown in the nature of man".

This diversity is part of the human condition. Without it there would be little, if anything, to political life.

Politics involves the inevitable risk that selfishness and narrowness of perspective interfere with public well-being. But politics is also the process by which private preferences are balanced against "the permanent and aggregate interests of the community", (to use Madison's language again). And politics is the process by which private judgments about the public interest are weighed and aggregated. When public purposes are defined in terms of individual preferences and interests, economics can provide invaluable tools for systematic analysis of the consequences of individual actions and choices for collective well-being.

Rigid disciplinary boundaries protect us from confusion by the insights of other disciplines working on similar problems. We have much to gain by learning from economics. However, we will do well to keep our bearings by drawing on the insights into political life deriving from the grand tradition of political philosophy, and from modern political science as well.

Economics is a little like Newtonian physics in the clarity and rigor of its mathematical systems. However, political life may be more like biology than like physics (Masters 1989, Schubert 1989). And this metaphor suggests that a subject matter that involves a "constantly and unpredictably shifting mixture of forces" can lend itself to objective and scientific analysis. This is our task and our challenge.

Endnotes

1. See also Connolly 1983.
2. See Mueller 1989 for a review.
3. See Kreps 1990, chapter 6, and Duffie and Sonnenschein 1989.
4. Actually, the theory was developed independently in Holland about the same time as the publication of Keynes's General Theory (1936). The seminal work is Tinbergen 1963. For an accessible contemporary treatment, see Bryant 1980.
5. See Kendrick 1988 for a technical treatment that is accessible to the layman.
6. See Kreps 1990, chapter 1, for a defense.
7. See Riker 1982, and Kingdon 1984 for theoretically sensitive treatments that show politics as fluid.
8. For original sources and further developments on market failure, see Cowen 1988. On government failure, see Wolf 1988, and Shepsle and Weingast 1984. See also Cullis and Jones 1987, and Bromley 1989.

References

- Alt, James E. 1979. The Politics of Economic Decline. New York: Cambridge University Press.
- Arrow, Kenneth J. 1951, 1963. Social Choice and Individual Values. New York: John Wiley.
- Arrow, Kenneth J. 1974. General Economic Equilibrium: Purpose, Analytic Techniques, Collective Choice. American Economic Review 64:253-272.
- Arrow, Kenneth J. and F.H. Hahn. 1971. General Competitive Analysis. San Francisco: Holden-Day, Inc.
- Blanchard, Olivier and Stanley Fischer. 1989. Lectures on Macroeconomic Theory. Cambridge: MIT Press.
- Blaug, Mark. 1980. The Methodology of Economics. Cambridge: Cambridge University Press.
- Bromley, Daniel W. 1989. Economic Interests and Institutions: The Conceptual Foundations of Public Policy. New York: Basil Blackwell.
- Bryant, Ralph C. 1980. Money and Monetary Policy in Interdependent Nations. Washington: The Brookings Institution.
- Chappell, Henry W. Jr. and William R. Keech. 1986. Policy Motivation and Party Differences in a Dynamic Spatial Model of Party Competition. American Political Science Review 80:881-899.
- Coleman, James S. 1990. Foundations of Social Theory. Cambridge: Harvard University Press.
- Connolly, William E. 1983. The Terms of Political Discourse. Princeton: Princeton University Press.
- Coughlin, Peter J. 1989. Economic Policy Advice and Political Preferences. Public Choice 61:201-216.
- Cowen, Tyler. 1988. The Theory of Market Failure: A Critical Examination. Fairfax, VA: George Mason University Press.
- Cullis, John G. and Philip R. Jones. 1987. Microeconomics and the Public Economy: A Defence of Leviathan. New York: Basil Blackwell.
- Downs, Anthony. 1957. An Economic Theory of Democracy. New York: Harper and Row.
- Duffie, Darrell, and Hugo Sonnenschein. 1989. Arrow and General Equilibrium Theory. Journal of Economic Literature 27:565-598.
- Easton, David. 1953. The Political System: An Inquiry into the State of Political Science. New York: Alfred A. Knopf.
- Elster, Jon. 1984. Ulysses and the Sirens. rev. ed. New York: Cambridge University Press.
- Elster, Jon, ed. 1986. The Multiple Self. New York: Cambridge University Press.

- Enelow, James M. and Melvin J. Hinich. 1984. The Spatial Theory of Voting: An Introduction. New York: Cambridge University Press.
- Fenno, Richard. 1973. Congressmen in Committees. Boston: Little, Brown.
- Frank, Robert H. 1985. Choosing the Right Pond: Human Behavior and the Quest for Status. New York: Oxford University Press.
- Frohock, Fred M. 1978. The Structure of "Politics". American Political Science Review 72:859-870.
- Hall, Richard L. 1987. Participation and Purpose in Committee Decision Making. American Political Science Review 81:105-127.
- Heller, Walter W. 1966. New Dimensions of Political Economy. Cambridge: Harvard University Press.
- James, William. 1902, 1958. Varieties of Religious Experience. New York: New American Library.
- Kendrick, D.A. 1988. Feedback: A New Framework for Economic Policy. Boston: Kluwer Academic Publishers.
- Keynes, John Maynard. 1936. A General Theory of Employment, Interest and Money. New York: Macmillan.
- Kingdon, John W. 1984. Agendas, Alternatives, and Public Policies. Boston: Little, Brown.
- Kreps, David M. 1990. A Course in Microeconomic Theory. Princeton: Princeton University Press.
- Kuran, Timur. 1990. Private and Public Preferences. Economics and Philosophy 6:1-26.
- Lakoff, George, and Mark Johnson. 1980. Metaphors We Live By. Chicago: University of Chicago Press.
- Lucas, Robert E., Jr. 1976. Econometric Policy Evaluation: A Critique. reprinted in Lucas. 1981. Studies in Business Cycle Theory. Cambridge: MIT Press.
- March, James G. 1978. Bounded Rationality, Ambiguity, and the Engineering of Choice. Bell Journal of Economics 9:587-608.
- Masters, Roger D. 1989. The Nature of Politics. New Haven: Yale University Press.
- Mueller, Dennis C. 1989. Public Choice II. New York: Cambridge University Press.
- Okun, Arthur. 1971. The Political Economy of Prosperity. Washington, DC: The Brookings Institution.
- Quirk, Paul J. 1988. In Defense of the Politics of Ideas. Journal of Politics 50:31-41.
- Rhoads, Steven. 1985. The Economist's View of the World. Cambridge: Cambridge University Press.
- Riker, William H. 1982. Liberalism against Populism. Prospect Heights, IL: Waveland Press.

- Sargent, Thomas J. and Neil Wallace. 1976. Rational Expectations and the Theory of Economic Policy. Journal of Monetary Economics 2:169-183.
- Schelling, Thomas C. 1984. Choice and Consequence. Cambridge: Harvard University Press.
- Schubert, Glendon. 1962. Is There a Public Interest Theory? in Carl J. Friedrich, ed., The Public Interest New York: Atherton Press.
- Schubert, Glendon. 1989. Evolutionary Politics. Carbondale: Southern Illinois University Press.
- Shepsle, Kenneth and Barry Weingast. 1984. Political Solutions to Market Problems. American Political Science Review 78:417-434.
- Stigler, George J. 1971. The Theory of Economic Regulation. Bell Journal of Economics and Management Science 2:1-21. Reprinted in Stigler, ed. 1988. Chicago Studies in Political Economy Chicago: University of Chicago Press.
- Taylor, John B. 1986. An Appeal for Rationality in the Policy Activism Debate, in R. W. Hafer, ed., The Monetary versus Fiscal Policy Debate. Totowa, NJ: Rowman and Allanheld.
- Thaler, Richard H. and H.M. Shefrin. An Economic Theory of Self-Control. Journal of Political Economy 89:392-406.
- Theil, Henri. 1971. Principles of Econometrics. New York: John Wiley and Sons.
- Tinbergen, Jan. 1963. On the Theory of Economic Policy. Amsterdam: North-Holland.
- Wittgenstein, Ludwig. 1969. On Certainty. Oxford: Basil Blackwell.
- Wolf, Charles, Jr. 1988. Markets or Governments: Choosing between Imperfect Alternatives. Cambridge: MIT Press.