

## CHAPTER 56

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# THE FUTURE OF ANALYTICAL POLITICS

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### 1 INTRODUCTION

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THE development of a science of political economy has a bright future in the long run. But the short run will most likely be similar to what has transpired these last thirty years in academia—a stumbling in the dark. I will address in this essay some serious problems with the recent research agenda in political economy that are likely to continue on in the near future. The problem with present research is that it too often ignores the following interrelated issues: (1) multidimensional political choices, (2) the lack of equilibrium in political games, (3) the lack of common knowledge, and (4) the complex non-linear dynamics of the political/economical system. Making significant progress requires addressing these problems. Moreover, the solution to these problems will be found in integrating various strands of social science research into a new formulation that deals with these issues. My discussion will be within the context of electoral politics.

### 2 THE PAST

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The influence of analytical political economy<sup>1</sup> has greatly increased since *An Economic Theory of Democracy* by Anthony Downs, *The Theory of Committees and Elections*

<sup>1</sup> I use the terms ‘analytic politics’ and ‘analytical political economy’ rather than ‘political economy’ by itself because there are two conflicting meanings of the term. To some the field of political economy is

by Duncan Black and *the Calculus of Consent* by James Buchanan and Gordon Tullock were first published. A Google search on the words ‘political economy’ yields 36,900,000 links, and similar searches on ‘formal theory in political science’ and ‘analytical politics’ yield 12,300,000 and 2,630,000 links respectively. In contrast the well-established field of comparative politics in academic political science yields 8,700,000 links for a Google search of ‘comparative politic.’

When I first started working in analytical politics with Otto Davis, the median voter result in one of the chapters of Downs’s thesis was hardly known. The dominant paradigm amongst political scientists interesting in voting behavior in those days was ‘party identification,’ abbreviated as PI. Voters vote for a party because they identify with that party based on sociological reasons. PI is similar to what is called ‘brand loyalty’ in marketing. A consumer buys a product with a brand that the consumer trusts. The idea of having choices based on utility functions was almost strictly confined to microeconomic theory and statistical decision theory until so-called ‘formal theorists’ successfully made inroads in the contentious field of political science. In the face of this success, many political scientists outside of formal theory argue that the major journals of the field such as the *American Political Science Review* and the *American Journal of Political Science* publish too many papers using mathematics and statistics that they cannot understand.<sup>2</sup>

The problem is that, after this fine start, much of the research did not progress in a meaningful way. For example, too many papers continue to assume a single dimension when this assumption clearly does not hold. Furthermore the assumption of common knowledge borrowed from modern game theory is much too strong and the game models ignore the non-linear dynamics of the system.

### 3 PROBLEMS FOR FUTURE ACADEMIC RESEARCH

The interdisciplinary nature of research on social choice problems that was standard among the top scholars in economics, psychology, and sociology in the 1950s and early 1960s has been replaced by the frantic effort to publish in top journals. If we are to make significant advances in political economics that will allow policy-makers

the development of theory of the interrelationship between politics and economics using the model of rational individual choice based on utility theory. To others ‘political economy’ is a Marxist-based theory. Another possible alternative term is ‘public choice.’ This term is perceived by many scholars to be the type of public finance economics developed by James Buchanan, Gordon Tullock, and their students and colleagues. I believe that the field of public choice is a subset of analytical politics.

<sup>2</sup> Some but not all important past contributions to analytical politics besides Arrow, Black, Buchanan and Tullock, and Downs are in the following papers and books: Aldrich 1994; Coughlin 1992; Cox 1987; Cox and McCubbins 1993, 1994; Denzau and Mackay 1981; Denzau and Parks 1977, 1979; Feld and Grofman 1987; Kadane 1972; Kramer 1972, 1973; McKelvey 1976, 1986; McKelvey and Ordeshook 1990; Miller 1980; Ordeshook 1986, 1997; Poole and Rosenthal 1996; Shepsle 1979; Slutsky 1977; and Riker and Ordeshook 1968.

to follow and predict shifts in the political structure of democracies, we will have to build interdisciplinary research teams. The models we have now have to be expanded and extended and their implications have to be tested with solid empirical analysis involving data.

The typical paper today uses a spatial model that is still based on a single dimension whose interpretation alternates between a single political issue and a latent ideological dimension, usually called a Downsian dimension. Even though multidimensional utility-based choice models have been an integral part of economic theory for a long time, papers on analytical politics in economics usually employ game theory based on the median voter model where the political choices are confined to the unit interval. This problem should be overcome by a generalization of the theory.

An especially creative application of single-dimensional theory in a multidimensional setting is the structurally induced model of legislatures developed by Kenneth Shepsle and Barry Weingast (1981, 1987). Each committee or subcommittee is restricted to a single issue and the median voter model is applied to the committee voting decisions. One problem with the original theory is that it requires that the legislators have separable preferences for the issues that are dealt with by other committees. The structurally induced equilibrium theory should be generalized to allow for the politicians to have non-separable preferences for the issues dealt with during a legislative session.

The extensive use of single-dimensional models is surprising as a number of multidimensional models have been developed in the past. The work (cited in the references) that I have done with Otto Davis, Peter Ordeshook, James Enelow, and Michael Munger is based on a theory where issues spaces are linked to a low-dimensional latent ideological space. This work is confined to explaining plurality rule systems. Laver and Schofield have developed a theory of multiparty politics with multiple dimensional spaces in the context of proportional representation systems. Because this approach relies on multiple rather than single-dimensional models, their work may serve as a basis for future research.

Most models of political games assume that the politicians are solely driven by their desire to get elected and re-elected. One major exception to this crucial assumption was the work of Donald Wittman (1973, 1977, 1983). Wittman argues that candidate and party preferences are part of the larger political game. This approach should be incorporated in a general theory of political competition.

Another problem that must be addressed is the oversimplification of political game theory. Political economic models are mainly developed by game theorists who apply the same assumption of common knowledge to political games as they do to economic games. Economists who model politics rarely cite relevant papers in the political science journals that do not conform to the styles that are demanded by economic theorists. The fashion these days is to develop a model that is so highly simplified that the model has little or no relationship with the complex reality of politics, nor does it have a relationship with analytical work published in political science journals.

The future for the development of analytical politics in academic economics is also limited by the rigid adherence in the profession to strict rationality. I expect that the developments in the new field of evolutionary economics will be incorporated in analytical politics. An important contribution in this field is a recent working paper by Andrew Lo. Lo argues that ‘much of what behavioralists cite as counterexamples to economic rationality—loss aversion, overconfidence, overreaction, mental accounting, and other behavioral biases—are, in fact, consistent with an evolutionary model of individuals adapting to a changing environment via simple heuristics.’ Modeling decision heuristics in the chaotic world of political games is an especially important challenge for the advancement of analytical politics. His paper is directed to a revision of the theory of market efficiency but his discussion applies to any decision process.

We also have to admit that economic science can only make very limited forecasts about economic systems especially in light of the fact that economics systems are non-linear, a fact supported by empirical evidence (see Brooks, Hinich and Molyneux 2000; and Brooks and Hinich 2001). A non-linear process is path dependent and non-scalable. This means that the reaction to a shock at time  $t_1$  can be radically different from the reaction of the same process to the same level of a shock at time  $t_2 > t_1$  even though the parameters of the system remain constant. This property of non-linear systems makes it very difficult to develop good predictions even in the short run. The simplified game-theoretic models in economics fail to capture this aspect of the economy. Likewise, simplified game-theoretic models of political systems cannot capture their non-linear dynamics.

The linear modeling and fitting approach may yield useful forecasts of a non-linear process but there is no way to know when the linear forecasts are very wrong. The usefulness of a linear approach to forecasting an episodic non-linear process is even more questionable than the use of a linear approach to forecasting a stationary non-linear process.

Political systems are not only highly non-linear, they have a fundamental uncertainty due to the lack of a majority rule core that has been studied for a variety of voting mechanisms by numerous scholars over the last forty years. It is time that we faced up to the theoretical results about the lack of equilibrium in political systems. Let us leave equilibrium analysis behind us and start on the quest to develop dynamic models of political systems that have the power to make non-trivial short-run forecasts beyond ‘tomorrow will be like today unless there is a surprise.’

The study of politics is the hardest task in the social sciences. The political system defines the scope of the economics system while taking resources from the economy in order to run campaigns and produce the types of compromises that are required of a stable economic and political system. Politics involves group choices as well as individual choices. Emotions are as important in politics as self-interest.

Political and social games are so complex that the assumption of common knowledge that all actors know all the states of nature in the games and the conditional joint density of the states is grossly false. The future is unknowable and the fundamental uncertainties in politics are as much a part of political life as in economics, sociology, and war.

Life is complex and so we must simplify our analysis to obtain useful insights. The art of research involves creation of simplifications that provide insights based on evidence and observations. Advances in analytic political economy will have to deal with the issues that I have raised in this chapter, but at the same time the models will have to make the appropriate simplifications.

## 4 SPECULATION ABOUT THE FUTURE OF ANALYTICAL POLITICAL THEORY FOR NATIONAL POLICY

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An organized program to develop a scientific approach to analyzing political systems would play an important role in support of a nation's defense and foreign policies. A political leadership in some nation will eventually decide to set up and fund a research institute to manage a continuing research program on these topics from an analytical perspective.

A research institute designed to make significant progress in our understanding of politics must have the following characteristics. Such an institute has to be independent of the day-to-day policy struggles that are a fact of life in any nation's government. The director of this institute should have a classical liberal arts education with a strong background in the natural sciences and a deep interest in the social sciences literature. The director should of course have experience in managing scientists and engineers working on projects that have well-defined goals, such as putting men on the moon and getting them back alive. I do not imply that the moon project goal is a model for the development of an analytical political system program, but practical and achievable goals must be set in order to avoid turning the institute into a report-generating machine.

I have no idea which country and what type of funding agency will carry out such a task nor when it will happen. I believe that it will happen, and that if one country does, then others will follow.

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