

**Serpents in the Sand: Essays on the Nonlinear Nature of Politics and Human Destiny.**



Review Author[s]:  
Daniel Carpenter

*The American Journal of Sociology*, Vol. 102, No. 1 (Jul., 1996), 286-288.

Stable URL:

<http://links.jstor.org/sici?sici=0002-9602%28199607%29102%3A1%3C286%3ASITSEO%3E2.0.CO%3B2-Y>

*The American Journal of Sociology* is currently published by The University of Chicago Press.

---

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/ucpress.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

---

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

tion and property rights as promoting economic efficiency. By minimizing transaction costs, these institutions facilitate the trades and contracts that promote economic efficiency. Wittman agrees with Marxists who claim that the structural dependence of the state on capitalist investment constrains political leaders. However, he believes that this is a good rather than a bad thing, claiming that the threat to disinvest forces politicians to promote economic efficiency.

Not everyone will find Wittman's arguments against analyses that use contemporary game-theoretic tools persuasive. However, he is to be commended for his boldness and originality in arguing against much of the contemporary thinking about political economy.

*Serpents in the Sand: Essays on the Nonlinear Nature of Politics and Human Destiny.* By Courtney Brown. Ann Arbor: University of Michigan Press, 1995. Pp. x + 175.

Daniel Carpenter  
*Princeton University*

Courtney Brown's second book is a sophisticated, considered, and methodologically polemical treatment of statistical modeling in the social-scientific study of politics. In *Serpents in the Sand*, which follows his much admired *Ballots of Tumult* (University of Michigan Press, 1991), Brown devotes his considerable mathematical, analytic, and graphically creative energies to two objects: (1) a sustained attack upon the paradigm of linear statistical modeling (principally in the form of linear regressions conducted upon individual-level data sets); and (2) a thorough demonstration of the analytic advances and graphic epiphanies to be had from estimating systems of nonlinear differential equations (primarily upon ecological data).

Brown's argument in *Serpents* is simple and appealing: the complexities and constraints of political networks, social context, community norms, and bounded human perception combine to create strong nonlinear patterns in electoral politics. In periods of electoral change, norms and networks create threshold and trigger effects that mute gradual preference changes and later yield rapid, often catastrophic political transformations. Brown uses this basic insight to generate new findings ranging from the possibility of electoral landslide when the electorate is voting in equilibrium (the 1964 Johnson victory, treated in chap. 4), the role of behavioral contagion in the fall of the Weimar Republic in the elections of 1930 and 1932 (chap. 5), and the destabilizing effects of electoral cycles upon the global ecosystem (chap. 6). The point of *Serpents* is that nonlinear modeling permits a revelation and analysis of these dynamics that linear regression analysis cannot offer.

*Serpents* will offer at least three lures to sociologists and political scientists. Readers interested in the aggregate behavior effects of networks

and norms will find Brown's nonlinear methods instructive. Brown operationalizes these contextual effects by cleverly exploiting both his aggregate-level data and a set of consistently employed interaction, cubed, and logistic terms in his regressions. Brown routinely reports estimations explaining better than 70% of model variance even though he begins with thousands of observations on but two or three variables. His thorough extraction of information from limited ecological data is an impressive demonstration of the utility of nonlinear modeling.

Indirectly, the book also offers advanced instruction in the estimation of panel data sets and ecological regressions. Researchers with interests in panel data sets of county-level (or geographical-unit-level) aggregates—among them, I suspect, historical sociologists who rely upon panels of census and aggregate data—will benefit from the nonlinear panel methods and differential-equation modeling employed in this book.

The final appeal is the graphics, and Brown's are consistently the best in the business, perhaps any business. Brown minces no words about his fondness for the portrayal of "beauty in nonlinear behavioral relationships" (p. 27). *Serpents* is replete with complex, subtle, and appealing computer-generated figures. Brown's graphical prowess and his textual interpretation of computer-generated figures yield a sophistication and richness rarely observed in the social sciences.

My enthusiasm for this book should be clear, but I warn prospective readers that the whole of *Serpents in the Sand* may be less than the sum of its parts. The gems in this book are the individual empirical chapters (chaps. 3–6), which are poorly connected to one another and to the methodological polemics in the first two chapters. These empirical chapters uniformly fail to illuminate Brown's argument that nonlinear models provide insight that linear models *cannot*. After chapter 3, comparisons between linear and nonlinear models disappear. An abiding sense remains that a collection of essays cannot do justice to Brown's homiletic aims in urging methodological change.

There are other didactic limitations too. Brown consistently keeps his readers at arm's length from his graphs, providing no appendix or summary with explanations of (or further reading about) how these could be generated by a reader. There is, however, an appendix with program code for nonlinear model estimation. Parameter estimates are difficult to interpret in many of the tables, due to the lack of any summary table explaining these (save for in chap. 6, p. 126). Finally, in an argument that invokes network concepts, there is insufficient citation of sociological network literature. Brown's chapter 3 would benefit from an engagement with Mark Granovetter's "strength of weak ties" argument and its extensions in the political sociology literature.

My final concern touches upon the theoretical and didactic purpose of the book: What exactly does nonlinearity entail? Does just any departure from a linear regression model qualify? If not, the book becomes a defense, not of nonlinear modeling per se, but of Brown's preferred variant: systems of nonlinear differential equations for ecological panel data. Why

did not Brown consider the previous contributions of stochastic process modeling (by scholars in political sociology such as John Padgett), of signal-processing models, or of bounded rationality or adaptive search models, all of which invoke nonlinearities and depart substantially from linear regression research?

*Why Parties? The Origin and Transformation of Political Parties in America.* By John H. Aldrich. Chicago: University of Chicago Press, 1995. Pp. xi + 349. \$48.00 (cloth); \$16.95 (paper).

Ruy A. Teixeira  
*Economic Policy Institute*

John Aldrich's book, *Why Parties? The Origin and Transformation of Party Politics in America*, is an attempt to apply rational choice theory to the history of political parties in the United States. Note, however, that Aldrich's perspective can fairly be described as "soft" rational choice, where human action is assumed to be goal directed or purposive but not exclusively dedicated to maximizing individual benefits, which is typically assumed by "hard" rational choice theorists. Reflecting this soft rational choice orientation, Aldrich treats politicians as rational political actors but sees their motivations as including values, principles, and policy preferences, as well as the strictly self-interested goal of election and reelection.

Applying this approach to American political parties, Aldrich finds, in a nutshell, that the origins of the three basic party forms in American history can be tied to the solution of three basic problems of democratic politics posed by rational choice theory: the ambitious politicians problem, the public goods/collective action problem, and the social choice problem. Specifically, the first two parties, the Federalists and Jeffersonian Republicans, were organized to solve the social choice problem—the difficulty of forming coherent and durable majorities over core principles. The second form of party, the mass party pioneered by Jackson and Van Buren and lasting until the 1960s, was designed to solve the public goods/collective action problem—the difficulty of mobilizing the electorate to support elites' efforts to capture office. The third form of party, the candidate-centered "party in service" with us today, has evolved to solve the ambitious politicians problem—the difficulty of channeling the ambitions of office and benefit seekers into party activity rather than outside of it. Finally, Aldrich puts the transitions between party forms, as well as partisan realignments *within* party forms, into a general theory of historical dynamics he terms "punctuated equilibrium," a term borrowed from Stephen Jay Gould's writings on evolution.

Does Aldrich succeed in his ambitious effort to apply rational choice theory to the historical evolution of American political parties? I think