

Can Political Science Emulate the Natural Sciences? The Problem of Self-Disconfirming Analysis*

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American political science has long aspired to emulate both the objective research methods of the natural sciences and their practical successes in controlling their objects of study. Regrettably, the putative tension between these two ambitions is rarely discussed. This essay seeks to touch off such a discussion by illuminating a significant problem that produces tension between objective knowledge accumulation and practical control of politics, but not of nature: self-disconfirming analysis. The problem is that in some situations, successful realization of the normative implications of political analysis may create new political patterns that are no longer consistent with the law-like regularities uncovered by that analysis. I demonstrate how this problem is manifest in the work of Robert Putnam, whose career exhibits a commitment to (naturalistic) scientific rigor as well as a passion for sociopolitical change. If the agenda implied by Putnam's scientific research were to be implemented, some of the causal claims established by that research would be removed from actual operation. I argue that the failure of political science to realize its naturalistic aspirations is at least partly attributable to this problem.

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Introduction

American political science has long aspired to emulate both the objective research methods of the natural sciences and their practical successes in controlling their objects of study. The profession's mainstream aspires to establish a cumulative, stable body of objective knowledge about politics at the same time that many political scientists wish to use such scientific knowledge to shape politics, for example by advising policymakers or contributing to public debates. Regrettably, the putative tension between these two ambitions is rarely discussed. This paper seeks to touch off such a discussion by illuminating a significant problem (if not the only one) that produces tension between objective knowledge and practical control of politics, but not of nature: self-disconfirming analysis. The problem is that in some situations, successful realization of the normative implications of political analysis may create new political patterns that are no longer consistent with the law-like regularities claimed/uncovered by that analysis. I tackle this problem primarily by demonstrating how it is manifest in the work of an important contemporary political scientist—Robert Putnam—whose career exhibits a commitment to (naturalistic) scientific rigor as well as a commendable passion for sociopolitical change. If Putnam were to successfully implement the agenda implied by his scientific research (and there is some evidence that his efforts to revitalize civic life in America are beginning to bear fruit), some of the causal claims established by that research would be removed from actual operation.

The Scientific Aspirations of Political Science

The desire to fashion the study of politics in the mold of the natural sciences has a long pedigree. Two centuries ago, Claude Henri de Saint-Simon complained that “hitherto, the method of the sciences of observation has not been introduced into political questions; every man has imported his point of view, method of reasoning and judging, and hence there is not yet any precision in the answers, or universality in the results. The time has come when this infancy of the science should cease. . . .”¹ Several decades later, John Stuart Mill wrote that “the backward state of the moral sciences can only be remedied by applying to them the methods of the physical sciences.”² And Karl Marx expressed hope that

1. Quoted in Leslie P. Thiele, *Thinking Politics: Perspectives in Ancient, Modern and Postmodern Political Theory* (Chatham House, NJ: Chatham House Publishers, 1997), 9.

2. Quoted in Thiele, *Thinking Politics*, 9.

“natural science will in time subsume the science of man just as the science of man will subsume natural science: there will be *one* science.”³

By the early twentieth century this view was gaining adherence within the young American discipline of political science. In his presidential address delivered before the sixth annual meeting of the American Political Science Association (APSA), A. Lawrence Lowell of Harvard University exhorted the discipline to develop a “physiology of politics,” namely adapting the scientific procedures used in the study of human organs to the analysis of political organs.⁴ In his presidential address to the APSA in 1925, Charles Merriam of the University of Chicago declared it was “fundamental” that “social science and natural science come together in a common effort to unite their forces in the greatest task that humanity has yet faced—the intelligent understanding and control of human behavior.”⁵ Likewise, the unity of science was the central theme of the presidential address delivered in 1927 by William Bennett Munro of Harvard University. Munro stated that “It is to the natural science that we may most profitably turn . . . for suggestions as to the reconstruction of our postulates and methods.”⁶

Over the years, the naturalistic vision of political science has become predominant in the profession even as, from time to time, it encountered serious challenges. In the 1960s prominent political theorists questioned the scientific aspirations of the behavioral revolution and triggered a rich debate on epistemological issues.⁷ But the challengers failed to reverse the positivist tide and the debate died down in the late 1970s. In the late 1980s, a new epistemological discussion—the so-called “Third Debate”—was sparked off by scholars of international relations (IR) who drew their inspiration from post-positivist philosophies of science or from post-modernist theories.⁸ The critique of

3. Quoted in Bent Flyvbjerg, *Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again* (New York: Cambridge University Press, 2001), 26; emphasis original.

4. Lawrence A. Lowell, “The Physiology of Politics,” *American Political Science Review* 4 (February 1910): 1–15. See also Dorothy Ross, *The Origins of American Social Science* (New York: Cambridge University Press, 1991), 290–93.

5. Charles Merriam, “Progress in Political Research,” *American Political Science Review* 20 (February 1926): 1–13; quotation from 12.

6. William Bennett Munro, “Physics and Politics—An Old Analogy Revised,” *American Political Science Review* 22 (February 1928): 1–11; quotation from 10.

7. See, for example, Herbert J. Storing, ed., *Essays on the Scientific Study of Politics* (New York: Holt, Rinehart, 1962); Norman Jacobson, “Political Science and Political Education,” *American Political Science Review* 57 (September 1963): 561–69; John G. Gunnell, “Deduction, Explanation, and Social Scientific Inquiry,” *American Political Science Review* 63 (December 1969): 1233–46; Alasdair MacIntyre, “Ideology, Social Science, and Revolution,” *Comparative Politics* 5 (April 1973): 321–42.

8. Richard K. Ashley, “The Poverty of Neorealism,” *International Organization* 38 (Spring 1984): 225–86; Friedrich V. Kratochwil, *Rules, Norms, and Decisions: On the Conditions of Practical and Legal Reasoning in International Relations and Domestic Affairs* (New York: Cambridge University Press, 1989); Yosef Lapid, “The Third Debate: On the Prospects of International Theory in a Post-Positivist Era,” *International Studies Quarterly* 33 (September 1989): 235–54; R. B. J. Walker, *Inside/Outside: International Relations as Political Theory* (New York: Cambridge University Press, 1993).

positivism advanced by these scholars constituted a central intellectual tributary of the “constructivist” surge of the 1990s. But as constructivism entered the mainstream of IR, many of its proponents distanced themselves from anti-naturalist philosophies of social sciences, embracing the view that “There is nothing in the intellectual activity required to explain processes of social construction that is epistemologically different than the intellectual activity engaged in by natural scientists.”⁹ As Alexander Wendt correctly observed, in the aftermath of the Third Debate the IR discipline remains divided between “a positivist *majority* arguing that social science gives us privileged access to reality [and] a post-positivist *minority* arguing that it is not.”¹⁰

Ultimately, then, the “Third Debate” failed to end the hegemony of the naturalistic model in IR,¹¹ let alone in political science as a whole. Indeed, affirmations of the naturalist orthodoxy by well-known contemporary scholars are not hard to find. In a book that has fast become an authoritative primer of political research methodology, Gary King, Robert Keohane and Sidney Verba of Harvard University explicitly endorsed Karl Pearson’s claim that “every group of natural phenomena, every phase of social life . . . is material for science. The unity of all science consists alone in its method, not in its material.”¹² This claim is remarkably similar to the claims articulated by Harvard’s Lowell and Munro many decades ago, even as the philosophy and methodology of natural science have evolved considerably in the intervening years, and even as King, Keohane and Verba possess a more sophisticated grasp of scientific method than their predecessors.

9. Alexander Wendt, *Social Theory of International Politics* (Cambridge: Cambridge University Press, 1999), 372. For similar, if milder, epistemological stances see Peter Katzenstein, ed., *The Culture of National Security: Norms and Identity in World Politics* (New York: Columbia University Press, 1993), 65, and Ted Hopf, *Social Construction of International Politics: Identities and Foreign Policies, Moscow, 1955 and 1999* (Ithaca: Cornell University Press, 2002).

10. Wendt, *Social Theory of International Politics*, 90; emphasis added. Explaining the repeated failures of the critics to upset the naturalistic hegemony is beyond the scope of this essay. A full explanation will have to delve into the politics and sociology of the profession as much as into the intellectual shortcomings of the anti-naturalist critiques. Still, it may be said that the failure of these critiques to gain greater resonance in the profession is attributable in some part to their largely philosophical and abstract nature—they were often jargon-laden and they rarely supplemented their philosophical arguments with detailed analyses of “actually existing” political science. My essay attempts to redress this shortcoming by providing a concrete, detailed account of how the career of an important contemporary scholar appears to belie in practice the naturalistic presuppositions to which he is committed in principle.

11. Mark Neufeld, “Reflexivity and International Relations Theory,” in *Beyond Positivism: Critical Reflections on International Relations*, ed. Clare T. Sjolander and Wayne S. Cox (Boulder: Lynne Rienner, 1994), 11–35.

12. Karl Pearson, *The Grammar of Science* (London: J.M. Dent & Sons, 1892), 16, quoted approvingly in Gary King, Robert Keohane, and Sidney Verba, *Designing Social Inquiry: Scientific Inference in Qualitative Research* (Princeton: Princeton University Press, 1994), 9.

The commitment of contemporary political science to the unity of science doctrine is also evident in explicit analogies that prominent scholars draw between the work of natural scientists and their own research. Putnam likened his analysis of the Italian “experiment” in regional government to the work of a botanist studying plant development.¹³ Two leading scholars of American politics investigated “why . . . some [American] states have more interest organizations than others” by likening these organizations to organisms and applying models developed by biologists to explain why, say, Australian rabbit populations grow faster than their genetically identical counterparts in England.¹⁴ And IR scholars Bruce Russett and John Oneal drew an analogy between quantitative peace research and epidemiological research. “To understand some of the influences that promote or inhibit interstate conflict,” they wrote, “we will be using the same methods that medical scientists use to understand the causes of disease. More and more, IR scholars are adopting such scientific methods to investigate the causes of war.”¹⁵

American political scientists have not only sought to emulate the research methods of the natural sciences but also their contributions to the betterment of the world. Lowell expressed the hope that the patient application of scientific methods would ultimately allow political scientists “to discover the principles that govern the political relations of mankind, and to teach those principles to the men who will be in a position to give effect to them.”¹⁶ Merriam was confident that political science would “go on to the reconstruction of the ‘purely political’ into a more intelligent influence on the progress of the race toward conscious control over its own evolution.”¹⁷ Russett and Oneal explained that just as epidemiological research helps prevent disease by prescribing or proscribing certain lifestyles and habits, so political research could help prevent violent conflict by prescribing certain political practices identified as causes of international peace (e.g. democracy).¹⁸ And Robert Putnam capitalized on the justly favorable reception of his Italian study with a public campaign for revitalizing civic life in the United States. Partly through Putnam’s efforts,

13. Robert D. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton: Princeton University Press, 1993), 7.

14. David Lowery and Virginia Gray, “The Population Ecology of Gucci Gulch, or the Natural Regulation of Interest Group Numbers in the American States,” *American Journal of Political Science* 39 (February 1995): 1–29; quotation from 2; see also Virginia Gray and David Lowery, *The Population Ecology of Interest Representation* (Ann Arbor: University of Michigan Press, 1996).

15. Bruce Russett and John Oneal, *Triangulating Peace: Democracy, Interdependence, and International Organizations* (New York: W.W. Norton, 2001), 82.

16. Lowell, “The Physiology of Politics,” 15.

17. Merriam, “Progress in Political Research,” 13.

18. Russett and Oneal, *Triangulating Peace*, 84–85.

the APSA has launched an initiative to advance the “public presence” of the profession.¹⁹

Alas, American political science has little to show for its century-long effort to follow the path of the natural sciences. Many individual works have produced real insights, and yet in area after area of political research these works have failed to accumulate into stable, widely shared bodies of knowledge of the kind common in at least some of the natural sciences during periods of “normal” progress.²⁰ The observations of two leading IR scholars apply to other sub-fields as well: “Nothing seems to accumulate, not even criticisms,” lamented Kenneth Waltz.²¹ And Jack Levy complained that “We have relatively few law-like generalizations in the field, the closest being the proposition that democracies rarely if ever fight each other. But even this proposition is contested, and even its supporters concede that this is an empirical ‘law’ for which a convincing theoretical explanation has yet to be found.”²²

Nor have political scientists been able to match the natural scientists’ impressive record of controlling the object of their study. Political scientists have little to show analogous to bridges, light bulbs, telephones, seedless grapes and other incontestable testimonies to the progress of natural science. Russett’s optimism notwithstanding, they have been unable to control war or other ills of the body politic in the same way that medical research has facilitated the control of various bodily diseases. Furthermore, as I explain below, even in those cases in which political scientists may legitimately claim to have affected modest political change—for example, Robert Putnam’s civic renewal campaign—their very success putatively undermines the pursuit of stable cumulative knowledge. In political science, in contrast to the sciences of nature, the ends of stable scientific knowledge and practical control may be incompatible with each other.

As Stephen White observed, adherents of the naturalistic approach to political science are becoming “like die-hard Marxists: absolutely convinced that the revolution will come and full of unending supply of reasons why it has failed so far.”²³ Perhaps the most popular of these reasons is the alleged “infancy” of the enterprise, first lamented by Saint Simon 200 years ago—the social sciences,

19. “Recent Council Actions,” *PS: Political Science and Politics* 35 (December 2002): 779; Bahram Rajaei, “APSA Ramps up Public Presence Activities in 2004,” *PS: Political Science and Politics* 38 (January 2005): 148.

20. Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 2nd ed. (Chicago: University of Chicago Press, 1970).

21. Kenneth N. Waltz, *Theory of International Politics* (New York: Random House, 1979), 18.

22. Jack Levy, “Explaining Events and Developing Theories: History, Political Science, and the Analysis of International Relations,” in *Bridges and Boundaries: Historians, Political Scientists and the Study of International Relations*, ed. Colin Elman and Miriam Fendius Elman (Cambridge: MIT Press, 2001), 39–83; quotation from 82.

23. Stephen K. White, “Review of *Making Social Science Matter*, by Bent Flyvbjerg,” *American Political Science Review* 96 (March 2002): 179–80.

Charles Taylor wryly remarked, are “constantly said to be in their ‘infancy’.”²⁴ Indeed, the continuing reiteration of this excuse,²⁵ without acknowledging its lengthening pedigree, is itself a symptom of political science’s failure to achieve the kind of steady knowledge accumulation that characterizes the normal stages of natural scientific investigation. The members of a truly “normal” scientific enterprise would *by definition* have been aware of the claims of their predecessors.

The “Intimacy” of Fact and Value in Political Science

To understand why political science has failed to become a normal science one must appeal not to the alleged infancy of the scientific quest but to a fundamental difference between natural and social science concerning the relationship between purpose and analysis, value and fact. This difference was cogently articulated more than sixty years ago by English IR theorist Edward H. Carr.

All scientific research, Carr observed, originates from human purpose. “It is the purpose of promoting health which creates medical science, and the purpose of building bridges which creates the science of engineering. Desire to cure the sicknesses of the body politic has given its impulse and its inspiration to political science . . . ‘The wish is father to the thought’ is a perfectly exact description of the origins of normal human thinking.” Nevertheless, Carr explained, the connection between purpose and analysis is far more “intimate” in political science than in the natural sciences.

In the physical sciences, the distinction between the investigation of facts and the purpose to which the facts are to be put is not only theoretically valid, but is constantly observed in practice. The laboratory worker engaged in investigating the causes of cancer may have been originally inspired by the purpose of eradicating the disease. But this purpose is in the strictest sense irrelevant to the investigation and separable from it. His conclusion . . . cannot help to make the facts other than they are; for the facts exist independently of what anyone thinks about them. In the political sciences, which are concerned with human behavior, there are no such facts. The investigator is

24. Charles Taylor, “Interpretation and the Sciences of Man,” in *Understanding and Social Inquiry*, ed., Fred Dallmayr and Thomas McCarthy (Notre Dame, IN: University of Notre Dame Press, 1977), 101–31; quotation from 106. Peter Winch similarly remarked: “That the social sciences are in their infancy has come to be a platitude amongst writers of textbooks on the subject.” See Winch, *The Idea of a Social Science and its Relation to Philosophy*, 2nd ed. (London: Routledge, 1990), 1.

25. For example, by Kim Quaile Hill, “Myths About the Physical Sciences and Their Implications for Teaching Political Science,” *PS: Political Science and Politics* 37 (July 2004): 467–71.

inspired by the desire to cure some ill of the body politic. Among the causes of the trouble, he diagnoses the fact that human beings normally react to certain conditions in a certain way. But this is not a fact comparable with the fact that human bodies react in a certain way to certain drugs. It is a fact which may be changed by the desire to change it; and this desire, already present in the mind of the investigator, may be extended, as the result of the investigation, to a sufficient number of other human beings to make it effective. The purpose is not, as in the physical sciences, irrelevant to the investigation and separable from it: it is itself one of the facts . . . Purpose and analysis become part and parcel of a single process.²⁶

I chose to quote Carr's commentary at some length for its lucidity more than for its originality. Carr drew on a tradition whose pedigree is as distinguished, if not as long, as that of the unity of science tradition. The critique of the unity of science doctrine was launched in the nineteenth century by German philosopher Wilhelm Dilthey and was subsequently adopted and extended by thinkers such as Max Weber, Hans-Georg Gadamer, Michel Foucault, Charles Taylor, Peter Winch, Anthony Giddens and Pierre Bourdieu. These thinkers, notwithstanding many differences among them, share skepticism about the applicability of the natural science model to the human sciences.²⁷ They have drawn several contrasts between the natural sciences and the human sciences, the most "fundamental"²⁸ of which is that the objects of social scientific research are thinking human beings who continually reflect on themselves and the social world surrounding them. This self-reflexivity changes how humans understand themselves and their world and hence how they act in the world. Self-reflexivity thus "makes human behavior far more irregular and unpredictable than the behavior of other forms of life or of inorganic forms of matter."²⁹

To complicate things further, as Carr had pointed out political science itself is part of the social world in which human beings are embedded and about which they reflect. Whereas the objects of natural scientific inquiry cannot "answer back" to their investigators, the objects of political research are capable of reading political scientific scholarship and learning from it.³⁰ Indeed, as I noted above, political scientists often express the desire to reach beyond their

26. Edward H. Carr, *The Twenty Years' Crisis, 1919–1939: An Introduction to the Study of International Relations* (New York: Harper Torchbook, 1964), 3–4.

27. See Flyvbjerg, *Making Social Science Matter*, chapter 3.

28. Taylor, "Interpretation and the Science of Man," 128; Richard Bernstein, *Beyond Objectivism and Relativism: Science, Hermeneutics and Praxis* (Philadelphia: University of Pennsylvania Press, 1983), 236.

29. Thiele, *Thinking Politics*, 11.

30. Anthony Giddens, "Hermeneutics and Social Theory," in *Profiles and Critiques in Social Theory*, ed. Anthony Giddens and Fred Dallmayr (Berkeley: University of California Press, 1982), quoted in Flyvbjerg, *Making Social Science Matter*, 32.

professional cloister and establish a “public presence.” They want Americans to read their studies of the decline of civic engagement and to learn from them how to revitalize American civic communities. They want world leaders to read their studies of the origins of wars and learn from them how to control the problem. They want the American occupation authority in Iraq to learn from their models of democratization how to “construct a hopeful new nation out of the ashes of dictatorship.”³¹ In other words, political scientists often want the norms implied by their analyses to become, or shape, political facts.

In what sense exactly does human reflection on the findings of political science destabilize the accumulation of scientific knowledge about politics? A compelling answer to this question was presented by distinguished University of Chicago philosopher Alan Gewirth. In a little-noticed essay, he defended the position that

Social science deals largely if not entirely with things which impinge directly on men’s values—his wealth, power . . . and so on. The aim of social science may be said to be to attain knowledge of the laws of these matters—that is, their cause-effect relations. Since, however, man as conscious voluntary agent is in large part both the knower and the subject-matter of these laws, his knowledge of their impact on his values may lead him to react on the laws reflexively in order to change them. Consequently, the laws of the social sciences cannot have the same fixity or permanence as the laws of the natural sciences.³²

In what way can human beings potentially change the laws of social science? Gewirth explained that although human reflection on past social correlations cannot result in the invalidation of these correlations—they remain valid for the domain in which they have been established—such reflection may lead to the “creation” of new correlations: “by means of his free decisions and consequent action, [man] causes a correlation to exist which did not exist before.”³³ Stated differently, when human agents adopt new volitions and decisions, informed by newfound awareness of the impact of certain cause–effect social relations on their values, the new awareness and the human decisions arising from it form new antecedent conditions for new correlations that supersede the old ones, effectively “remov[ing] them from actual operation.”³⁴ Since “the decisions in

31. James Sterngold, “Stanford Expert Says Iraq Spinning Out of Control.” *San Francisco Chronicle*, April 25, 2004.

32. Alan Gewirth, “Can Man Change Laws of Social Science?” *Philosophy of Science* 21 (July 1954): 229–41; quotation from 230.

33. Gewirth, “Can Man Change Laws of Social Science?” 234.

34. Gewirth, “Can Man Change Laws of Social Science?” 241.

which those conditions partly consist are made by men, . . . in this sense the new law or correlation is also made or created by men, and is not merely found by men in the sense in which they find the laws of natural objects which cannot be affected by human decisions.”³⁵

As Gewirth pointed out, the “reflexive reaction of men on social laws has interesting logical as well as social consequences.”³⁶ To the extent that human beings react to the impact of social scientific predictions on their values, their reactions may logically result either in a dynamic of self-confirming prediction (“self-fulfilling prophecy,” in Gewirth’s words) or a dynamic of self-disconfirming prediction (dubbed “self-destroying prophecy” by Gewirth).³⁷

Self-Confirming and Self-Disconfirming Analysis

In many cases, the connection between norm and fact in political science assumes the form of a self-confirming prediction. In such cases, the normative implications of the analysis are harmonious with the factual regularities being analyzed: to the extent that human agents would adopt the norms implied by the analysis, their changed behavior would reinforce the factual observations established by the analysis. Thus, if we find through empirical analysis that the spread of democratic norms is conducive to world peace, our findings may persuade people to adopt these norms, thus leading to the spread of democracy and peace. As Russett put it,

understanding the sources of democratic peace can have the effect of a self-fulfilling prophecy. Social scientists sometimes create reality as well as analyze it. Insofar as norms do guide behavior, repeating those norms helps to make them effective. Repeating the norms as descriptive principles can help to make them true. Repeating the proposition that democracies should not fight each other helps reinforce the probability that democracies will not fight each

35. Gewirth, “Can Man Change Laws of Social Science?” 235. See also H. Hanalka, “Is It Possible to Change the Laws of the Social Sciences: *Lebensswelt* and Critical Reflection in Habermas’ *Theorie des Kommunikativen Handelns*,” *Philosophy and Social Criticism* 9 (March 1982): 191–226, for a lucid statement of Gewirth’s position.

36. Gewirth, “Can Man Change Laws of Social Science?” 230.

37. For other discussions of reflexive predictions, which basically agree with Gewirth’s position, see Cecil Miller, “The Self-Fulfilling Prophecy: A Reappraisal,” *Ethics* 72 (October 1961): 46–51, and Daya Krishna, “The Self-Fulfilling Prophecy and the Nature of Society,” *American Sociological Review* 36 (December 1971): 1104–07. On the other hand, Roger C. Buck, “Reflexive Predictions,” *Philosophy of Science* 30 (October 1963): 359–69, though he acknowledged that reflexive predictions are peculiar to human affairs, argued that they do not pose a very serious problem for social science because social scientists can restrict the dissemination of their predictions. But Buck failed to mention, let alone contend with, Gewirth’s analysis. Moreover, even if Buck’s arguments were right in principle, in practice political scientists often do want their analyses to be widely disseminated and have a practical impact.

other. . . .A norm that democracies should not fight each other thus is prudentially reinforced, and in turn strengthens the empirical fact about infrequent violent conflict.³⁸

This statement is striking, for in admitting that “social scientists sometimes create reality” Russett contradicts a fundamental presupposition of the naturalistic model of social science to which he is committed: subject–object separation. In other words, Russett basically concedes that unlike laws of nature, whose operation is independent of human knowledge about nature, the operation of the law-like causal relationship between democracy and international peace is to some degree dependent on human awareness of this relationship. Still, the effect of the reflexive dynamic described by Russett is to stabilize knowledge about international peace rather than frustrate its accumulation. In this case, the pursuit of political scientific analysis and the pursuit of the analyst’s political values are logically consistent with each other.

If in many cases political analysis and political purpose reinforce each other, there are other cases in which analysis and purpose are putatively at odds with each other, that is, the relationship between them is self-disconfirming. In such cases, the enactment of the norms implied by political research would not reinforce the validity of the study’s empirical findings but rather negate the study’s predictions. Gewirth provides the following hypothetical example: “if there is wide acceptance of a prediction that because of its superior wealth a nation will win a war in which it is presently engaged, this may lead to a complacency which results in losing the war. Here men’s knowledge of a social ‘law’—the correlation, other things being equal, between superior wealth and military success—leads to action which removes the effective operation of the law.”³⁹ It is in cases of this kind that the pursuit of stable, cumulative knowledge about politics is most glaringly frustrated by the putting of that knowledge into practice.

Hypothetical examples of the logic of self-disconfirming political predictions are not hard to make up. But to what extent does the problem manifest itself in actually existing political science? In the remainder of this essay, I discuss how the

38. Bruce Russett, *Grasping the Democratic Peace: Principles for a Post-Cold War World* (Princeton: Princeton University Press, 1993), 136.

39. Gewirth, “Can Man Change Laws of Social Science?” 230. More formally, the self-disconfirming prediction may take either one of the following forms: (1) “If there is a prediction P that a certain kind of action A will result in a certain consequence C, then this prediction has the result that the contrary. . . of action A occurs and that it results in the occurrence of the contrary of consequence C.” (2) “If there is a prediction P that a certain kind of action A₁ will result in a certain consequence C, then this prediction has the result that action A₁ and also other action A₂ occur, and that these actions have the result that the contrary of consequence C occurs.” See Gewirth, “Can Man Change Laws of Social Science?” 230. Gewirth’s hypothetical example corresponds to the second type.

problem of self-disconfirming analysis is inherent in the work of one of the most distinguished political scientists of our time, Robert Putnam.

A caveat is in order before I proceed, though. The naturalistic model of science is obviously not a fixed, uncontested ideal. The natural science ideal that Mill wished to emulate in the nineteenth century is not identical to the one that, say, King, Keohane and Verba look up to today. Indeed, the naturalistic epistemological model elaborated by philosophers of science has undergone considerable change and contestation, evolving (in the twentieth century alone) from logical positivism, through various critiques (Popper's, for example) and fundamental challenges (such as Kuhn's work), to "post-positivism."⁴⁰ Along the way, some of the qualities that were formerly said to be unique to the human sciences—for example, their theory-ladenness or the complexity of their subject matter—have come to be associated with naturalistic epistemology as well.⁴¹ Post-positivist philosophers such as Richard Rorty and Richard Bernstein have even gone so far as to turn the unity of science doctrine on its head, that is, to argue that the natural science ideal cannot be found even in the natural sciences themselves, and that actually existing natural science involves substantial hermeneutic activity of the kind elaborated by Dilthey, Weber, Gadamar, and their followers.

But powerful though these philosophical arguments may be, they do not negate the fundamental observation that human objects of scientific research can read and react to that research whereas physical and organic objects cannot.⁴² Furthermore, even if these philosophical argument were perfectly compelling in the abstract, they fall short of accounting for the empirical evidence of substantial differences between the natural and political sciences: the failure of political science to achieve the stable accumulation of knowledge that characterizes some of the natural sciences and the incontrovertible fact that the natural sciences have airplanes and aspirin to show for their efforts, whereas political science has few comparable practical achievements to display.⁴³ Without pretending to establish *the* cause of these failures of political science, I argue that one of their important causes is the tension between political purpose and political (but not natural) scientific analysis arising when the normative implications of the analysis, if acted upon, create new socio-political patterns and remove the correlations observed by the analysis from actual operation.

40. See M.E. Hawkesworth, *Theoretical Issues in Policy Analysis* (Albany: SUNY Press, 1988), chapter 3; Donald Polkinghorne, *Methodology for the Human Sciences: Systems of Inquiry* (Albany: SUNY Press, 1983), chapter 1–3.

41. Bernstein, *Beyond Objectivism and Relativism*, 32–33.

42. As conceded by Bernstein, *Beyond Objectivism and Relativism*, 236.

43. See Flyvbjerg, *Making Social Science Matter*, 28–30.

Self-Disconfirmation in Putnam's Work

In his famous book *Making Democracy Work* Robert Putnam studied a “unique experiment in institutional reform conducted in the regions of Italy over the last two decades.”⁴⁴ In the 1970s, Rome established twenty new regional governments throughout Italy, all endowed with nearly identical institutional structures. Putnam ingeniously espied here an opportunity to turn a government-sponsored experiment into a social scientific one:

The Italian regional experiment was tailor-made for a comparative study of the dynamics and ecology of institutional development. Just as a botanist might study plant development by measuring the growth of genetically identical seeds sown in different plots, so a student of government performance might examine the fate of these new organizations, formally identical, in their diverse social and economic and cultural and political settings. Would the new organizations actually develop identically in soils as different as those around Seveso and Pietrapertosa? If not, what elements could account for the differences? The answers to these questions are of importance well beyond the borders of Italy, as scholars and policymakers and ordinary citizens in countries around the world . . . seek to discover how representative institutions can work effectively.⁴⁵

This passage shows clearly that Putnam understands his research craft to be analogous to that of a botanical researcher. In this analogy, the botanist corresponds to the political scientist and the objects of botanical study—the seeds and the soils—correspond to political institutions and their historical/social conditions, respectively. The passage also implies that Putnam is interested not only in studying representative institutions but in shaping them—he sees himself as participating alongside “policymakers and ordinary citizens” in a quest to improve institutional performance. But what are the properties of botany that correspond to these policymakers and citizens? If Putnam were to carry his analogy to its logical conclusion, he would have amended the closing sentence of the paragraph to the effect that just as botanists *and soils and seeds* seek to discover how to improve agricultural yields throughout the world, so do “scholars and policy makers and citizens in countries around the world . . . seek to discover how representative institutions can work effectively.” The absurdity of such a statement elucidates the limits of the analogy between political and botanical science. Putnam wants the objects of his research to read his work and

44. Putnam, *Making Democracy Work*, 3; emphasis added.

45. Putnam, *Making Democracy Work*, 7.

respond to it by modifying their behavior; the botanist cannot reasonably entertain such a hope with regard to the objects of her own research. The extension of Putnam's ideas to the minds of his objects creates a new social fact (or a new "antecedent condition," in Gewirth's terms) that has no analog in the realm of botany.

Putnam's analysis of the Italian "experiment" in regional government is sufficiently well-known to require but a brief recapitulation here. Imaginatively combining methods of statistical survey research, personal interviews, and case studies, Putnam found that the regional government institutions inaugurated in the early 1970s varied dramatically in their performance. Generally speaking, in Northern Italy they functioned efficiently and were responsive to citizens' demands whereas in the Italian South the regional governments performed lethargically, unresponsively, and corruptly. The main cause of this pattern, according to Putnam's analysis, is the variation in "civic-ness" across the two regions. In the North, civic life is rich. The Northern regions of Italy "have many choral societies and soccer teams and bird-watching clubs and rotary clubs. Most citizens in those regions read eagerly about community life in the daily press. . . . Social and political networks are organized horizontally, not hierarchically. The community values solidarity, civic engagement, cooperation, and honesty." The regions of Southern Italy, on the other hand, are "characterized by the French term *incivisme*. Public life in these regions is organized hierarchically. . . . The very concept of 'citizen' here is stunted. . . . Few people aspire to partake in deliberations about the commonweal, and few such opportunities present themselves. . . . Engagement in social and cultural associations is meager. . . . Corruption is widely regarded as the norm." Therefore, Putnam concludes, "it is hardly surprising that representative government [in the Southern regions] is less effective than in more civic communities."⁴⁶

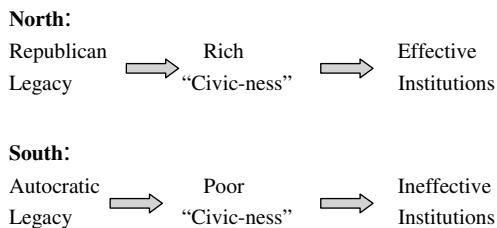
Putnam then proceeded to analyze the "contrasting pasts of Italy's regions" as the primary cause of the variation in their civic-ness. "Social patterns traceable from early medieval Italy," he found, "turn out to be decisive in explaining why, on the verge of the twenty-first century, some communities are better able than others to manage collective life and sustain effective institutions."⁴⁷ In the South, the collapse of Byzantine rule in the eleventh century was followed by the establishment of a powerful Norman kingdom, which was singularly advanced administratively and economically, but whose social and political arrangements were feudal and "strictly autocratic."⁴⁸ In the North, on the other hand, a republican-communal form of self-government had emerged, which "gradually

46. Putnam, *Making Democracy Work*, 115.

47. Putnam, *Making Democracy Work*, 121.

48. Putnam, *Making Democracy Work*, 123.

Figure 1
Putnam's Empirical Findings in Making Democracy Work



came to constitute the major alternative to the manor-based, lord-and-serf feudalism of the rest of medieval Europe.⁴⁹ The centralized-feudal legacy of the South set it on a historical path that resulted in the impoverishment of civic life and values there whereas the republican legacy of the North set it on a course that culminated in the rich civic life characterizing the region today.

In sum, imaginatively combining statistical, anthropological, and historical research methods, Putnam analyzed the impact of historical and social human conditions on the performance of human political institutions the way a botanist would analyze the impact of soil conditions on the vitality of seeds and plants. He found that the more communal the historical legacy of a region, the richer its civic life, and that, in turn, the richer a region's civic life, the more effective its governmental institutions. This empirical regularity is represented schematically in Figure 1.

Putnam clearly believes that the validity of his analysis transcends Italy: "The theoretical framework we develop . . . is intended not merely to account for the Italian case, but to conjoin historical and rational choice perspectives in a way that can improve our understanding of institutional performance and public life in many other cases."⁵⁰ In the concluding section of the book, Putnam thus discusses how "lessons from the Italian regional experiment" may be applicable not only to Italy itself but to the "ever larger numbers of men and women" throughout the world who harbor "high aspirations" for the establishment of effective democratic institutions.⁵¹ What lessons, Putnam asks, can the citizens of "the Third World today and the former Communist lands of Eurasia tomorrow, moving uncertainly toward self-government," learn from the bleak "fate of the Mezzogiorno?"⁵²

49. Putnam, *Making Democracy Work*, 124.

50. Putnam, *Making Democracy Work*, 16.

51. Putnam, *Making Democracy Work*, 181.

52. Putnam, *Making Democracy Work*, 183.

The first lesson that Putnam gleans from his research is that “*social context and history profoundly condition the effectiveness of institutions*: Where the regional soil is fertile, the regions draw sustenance from regional traditions, but where the soil is poor, the new institutions are stunted.”⁵³ This lesson, Putnam recognizes, is “depressing.” Its normative implications constitute, in the words of a Southern Italian reformer quoted by Putnam, “a counsel of despair! You’re telling me that nothing I can do will improve our prospects for success. The fate of the reform was sealed centuries ago.”⁵⁴

Had Putnam stopped here, the tension between analysis and purpose in his work would have been rather minimal. To the extent that this “counsel of despair” were accepted by his audience—“the president of Basilicata” or “the prime minister of Azerbaijan,” for example—their resulting behavior would have been quiescent and thus it would have reinforced the validity of Putnam’s claims. In other words, in such a case Putnam’s predictions would have been self-confirming. In such a case, moreover, the analogy between political and botanical research would have been more compelling: “the prime minister of Basilicata cannot move his government to Emilia, and the prime minister of Azerbaijan cannot move his country to the Baltic” any more than the botanist can move the fertile soil of the American Midwest to the Sahara desert.⁵⁵

But Putnam is reluctant to resign himself to this disheartening conclusion. He insists that

The full results of the regional reforms are far from an invitation to quietism. On the contrary, a second lesson of the regional experiment is . . . that *changing formal institutions can change political practices*. The reform had measurable and mostly beneficial consequences for regional political life. As institutionalists would predict, institutional changes were (gradually) reflected in changing identities, changing values, changing power, and changing strategies. These trends transpired in the South no less than in the North.⁵⁶

Putnam concedes that in the South, “the new institution has not *yet* lived up to the highest expectations of its optimistic advocates.” Even though the gap between North and South remains wide, he writes, “compared to where the South would be today without the regional reform, . . . the South is much better off.”⁵⁷ Thus, as his usage of the term “yet” indicates, Putnam refuses to abandon

53. Putnam, *Making Democracy Work*, 182; emphasis original.

54. Putnam, *Making Democracy Work*, 183.

55. Putnam, *Making Democracy Work*, 183.

56. Putnam, *Making Democracy Work*, 184; emphasis original.

57. Putnam, *Making Democracy Work*, 184; emphasis added.

the hope that the South would one day catch up with the North in civic-ness and government performance.

Has the reform also begun to reverse the vicious uncivic circles that have trapped the Mezzogiorno in backwardness for a millennium? We cannot say, for the final lesson from this research is that *most institutional history moves slowly*. Where institution building is concerned . . . time is measured in decades. This . . . has been true of the Italian regions and of the communal republics before them, and it will be true of the ex-Communist states of Eurasia, even in the most optimistic scenarios.⁵⁸

In sum, Putnam calls upon citizens and politicians in the Italian South, or the Third World, to be realistic about the constraints imposed upon them by their historical and social circumstances, but at the same time he reassures them that hope is not lost: persistent, patient efforts to revitalize civic communities and to reform government institutions would pay off in the long run. “Those concerned with democracy and development in the South,” the book’s concluding paragraph reads, “should be building a more civic community, but they should lift their sights beyond instant results. . . . Building social capital will not be easy, but it is the key to making democracy work.”⁵⁹

Now what would happen to the causal empirical regularities established by Putnam’s analysis if his prescriptions were to be realized? What if the citizens and leaders of the South (or Azerbaijan, for that matter) heeded Putnam’s advice that they “should be building a more civic community” even as they internalized his admonition to “lift their sights beyond instant results”? *If they were to engage patiently in the difficult task of revitalizing community, building social capital, and reforming their institutions, and if their efforts were successful (as Putnam cautiously hopes), their success would have disconfirmed Putnam’s prediction that the South, because of its weak civic norms, would have weak political institutions.* They would have created new sociopolitical correlations that would have transcended, and render effectively inoperative, the causal generalizations reported by Putnam. A new sociopolitical pattern would be established, whereby the autocratic legacy of the past correlates with *strong* civic communities and *effective* government, as schematically represented in Figure 2.

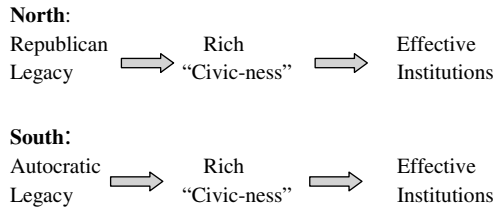
By strengthening their civic communities and improving their institutions, the people of the South would have narrowed or even eliminated the civic and institutional gaps separating them from the North, and thus the positive correlation between civic-ness and institutional performance would have

58. Putnam, *Making Democracy Work*, 184; emphasis original.

59. Putnam, *Making Democracy Work*, 185.

Figure 2

What Would Happen if Putnam's Objects Followed His Prescriptions?



become null. Furthermore, in the South, the positive relationship between the region's millennium-old autocratic legacy—a factor which the Southerners cannot possibly control—and its civic and institutional performance would have been *reversed*. It would be transcended by a new relationship between a newly made history of a more civic character—stimulated by newfound awareness of Putnam's analysis—and newly reformed, effective institutions.

Additionally, though Putnam would not have approved of such a reaction, if the citizens of the *North* were to read Putnam's analysis, they might have reacted to it by becoming complacent. They might be tempted to rest on their civic laurels and slacken their community building efforts because Putnam made them aware of the excellent health of their civic culture and institutions. If they were indeed to become complacent, their resulting behavior would contribute to further eliminating the variation between North and South and, more fundamentally, it would have *reversed* the relationship between the region's republican history and its civic and institutional vitality. A new sociopolitical pattern would have been created—a correlation between (a) a newly made reality of civic decline, interacting with the complacent attitude induced by awareness of Putnam's prediction, and (b) deteriorating political institutions.

The problem of self-disconfirming predictions cannot be "fixed" by incorporating public awareness of the predictions of a causal model into the model itself. Putnam cannot effectively elude this problem by adding to his model a causal variable denoting public knowledge of his analysis. For not only would such a maneuver explicitly contradict the presupposition of subject-object separation which underlies the positivist conception of science, it would also run into an intractable logical difficulty: how could Putnam possibly "test" a causal model that includes a causal factor specified to have an effect only after the publication of the results of the test? He cannot, in other words, empirically estimate the causal effect of a factor—the impact of the findings reported in his work—before the publication of that very work.

Bowling Alone

Although the lessons of *Making Democracy Work* were ostensibly addressed to reformers in the world's democratizing areas, as Putnam was completing the book he was becoming increasingly discontented with the state of one of the world's oldest democracies: the United States. In the book's opening paragraph he noted that "as American democratic institutions enter their third century, a sense is abroad in the land that our national experiment in self-government is faltering."⁶⁰ It gradually dawned on him, Putnam recalled later, that "one of the conclusions of the Italian research—that democracy depended on social capital—might have implications for contemporary America."⁶¹ Putnam energetically threw himself into the task of "spelling out those implications."⁶²

The first published product of Putnam's new research project was an article printed in the *Journal of Democracy* in early 1995 under the title "Bowling Alone."⁶³ Although Putnam was then, by his own admission, "an obscure academic," and although the *Journal of Democracy*, too, was virtually unknown outside academic circles, the article prompted a "deluge" of public attention. "I was invited to Camp David," Putnam wrote, "lionized by talk-show hosts, and . . . pictured with my wife, Rosemary, on the pages of *People*. The explanation was not late-blooming genius, but the simple fact that I had unwittingly articulated an unease that had already begun to form in the minds of many ordinary Americans."⁶⁴ Thus, as a result of the success of the article, Putnam was able to realize his desire to rub shoulders with and work alongside the "policymakers and ordinary citizens" he alluded to in *Making Democracy Work*. He capitalized on this success with a well-funded public campaign to revitalize civic community in America. Putnam founded the Saguaro Seminar on Civic Engagement in America and under its auspices he "recruited a blue ribbon group of civic leaders and scholars from across the country," who "worked together to define an actionable national agenda for civic revitalization."⁶⁵ He also developed two web sites—bowlingalone.com and bettertogether.org—to teach Americans "how to help rebuild our nation's social capital."⁶⁶

Putnam's admirable social reform campaign and his growing public exposure neither diminished his commitment to social scientific research nor shook his

60. Putnam, *Making Democracy Work*, 3.

61. Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Touchstone, 2000), 505.

62. Putnam, *Making Democracy Work*, xiv.

63. Robert D. Putnam, "Bowling Alone: America's Declining Social Capital," *Journal of Democracy* 6 (January 1995): 65–78.

64. Putnam, *Bowling Alone*, 506.

65. Putnam, *Bowling Alone*, 509.

66. Putnam, *Bowling Alone*, back cover.

belief that such research was analogous to natural scientific inquiry. Aided by “unsolicited, unexpected, and unrequited generosity beyond imagining” (which confounded the central premise of his work—the decline of social bonds in America), he was able to continue his research efforts, culminating in the publication of the massive book *Bowling Alone*.⁶⁷

Throughout *Bowling Alone* Putnam occasionally employs botanical and epidemiological analogies. He writes, for example, that “for people as for plants, frequent repotting disrupts root systems. It takes time for a mobile individual to put down new roots.”⁶⁸ But the primary naturalistic analogy in this book is not to botany as much as to the fields of meteorology and climatology:

The challenge of studying the evolving social climate is analogous in some respects to the challenge facing meteorologists who measure global warming: we know what kind of evidence we would ideally want from the past, but time’s arrow means that we can’t go back to conduct those well-designed studies. Thus if we are to explore how our society is like or unlike our parents’, we must make imperfect inferences from all the evidence that we can find.

The most powerful strategy for paleometeorologists seeking to assess global climate change is to triangulate among diverse sources of evidence. If pollen counts in polar ice, and the width of southwestern tree rings, and temperature records of the British Admiralty all point in a similar direction, the inference of global warming is stronger than if the cord of evidence has only a single strand.

In this book I follow that same maxim. Nearly every major generalization here rests on more than one body of independent evidence . . . Of course, social change, like climate change, is inevitably uneven . . . We should not expect to find everything changing in the same direction and at the same speed, but those very anomalies may contain important clues to what is happening.⁶⁹

In this analogy, then, Putnam corresponds to the paleometeorologist, the object of Putnam’s research—social change—corresponds to climate change, and the

67. Putnam, *Bowling Alone*, 505.

68. Putnam, *Bowling Alone*, 225. Or consider the following analogy, from *Bowling Alone*, 184–85: “When seeking to solve a serial crime (or, for that matter, to understand a public health epidemic) investigators typically look for common features among the victims . . . Similarly, social scientists, faced with a trend like declining social participation, look for concentrations of effects. . . . Unfortunately for our detective strategy, synergistic effects (rather like an epidemic that has spread beyond its initial carrier) thwart unequivocal verdicts.”

69. Putnam, *Bowling Alone*, 26.

indicators of this social change—measures of club membership, for example—correspond to temperature records or pollen counts.

Later in the book, Putnam extends this analogy:

More than a quarter century ago, just as the first signs of [civic] disengagement were beginning to appear in American politics, political scientist Ithiel de Sola Pool observed that the central issue would be—it was then too soon to judge, as he rightly noted—whether the development represented a temporary change in the weather or a more enduring change in the climate. It now appears that he had spotted the initial signs of a climatic shift. Moreover, just as the erosion of the ozone layer was not proven scientifically until many years after the proliferation of the chlorofluorocarbons that caused it, so too the erosion of America's social capital became visible only several decades after the underlying process had begun.⁷⁰

The new wrinkle in this passage is that Putnam analogizes the gases causing climate change to the generational change and/or television-watching habits which—as I explain below—he finds to be the primary causes of America's social change.

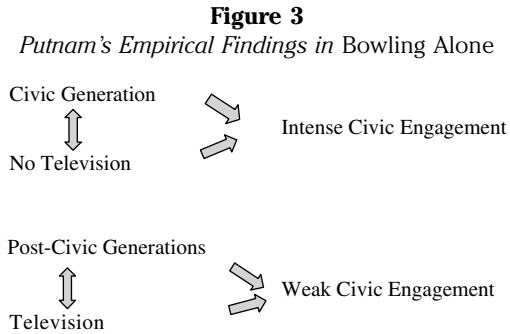
In *Bowling Alone*, Putnam presents an impressive array of evidence—drawn from multiple and vast data sources—documenting a dramatic decline in civic engagement in the United States since the 1960s. He also seeks to explain why this decline has occurred, concluding that the most important explanatory factor (or independent variable) was “the replacement of an unusually civic generation,” whose life experiences were shaped by the Great Depression and World War II, “by several generations (their children and grandchildren) that are less embedded in community life.”⁷¹ This generational shift, Putnam concludes, “might account for perhaps half of the overall decline.” Another 25 percent or so of the decline in civic engagement is attributable to “the effect of electronic entertainment—above all, television—in privatizing our leisure time” and “perhaps [an additional] 10–15 percent of the total might be attributed to the joint impact of generation and TV—what we might term in shorthand ‘the TV generation.’”⁷² In sum, as presented schematically in Figure 3, the two leading causes of the impoverishment of civic life in America in the late twentieth century are the gradual passing away of the World War II generation and the advent of television.

Now Putnam could have drawn from his empirical analysis a lesson of despair. In light of his finding that the most important cause of America's civic decline is

70. Putnam, *Bowling Alone*, 256.

71. Putnam, *Bowling Alone*, 274.

72. Putnam, *Bowling Alone*, 283–84.



the inevitable passing away of the “civic generation,” he could have told Americans that, though the impoverishment of civic life is a bad thing, little can be done about it. Had he drawn this lesson, the relationship between his empirical analysis and his political purpose would have been putatively self-confirming—enacting the lesson would have reinforced the causal pattern Putnam uncovered. But, as I indicated above, Putnam refuses to accept this quietest lesson, and he has embarked on a public campaign to revitalize American civic life. As he put it in the concluding chapter of *Bowling Alone*:

I recognize the impossibility of proclaiming any panacea for our nation’s problems of civic disengagement. On the other hand, because of my experience in spearheading in recent years a concerted nationwide conversation modeled on the intensive interchange among scholars and practitioners in the Progressive Era, I am optimistic that, working together, Americans today can once again be as civically creative as our Progressive forebears. These deliberations, the “Saguaro Seminar: Civic Engagement in America,” brought together thinkers and doers from many diverse American communities to shape questions and to seek answers. The ensuing discussions have informed my suggestions in this chapter in many ways. The group’s objectives have been, first, to make Americans more aware of the collective significance of the myriad minute decisions that we make daily to invest—or disinvest—in social capital and, second, to spark the civic imagination of our fellow citizens to discover and invent new ways of connecting socially that fit our changed lives.⁷³

73. Putnam, *Bowling Alone*, 403–04.

Putnam and his fellow seminarians then proceeded to issue a series of “challenges” to Americans, such as:

*Let us find ways to ensure that by 2010 the level of civic engagement among Americans then coming of age in all parts of our society will match that of their grandparents when they were that same age, and that at the same time bridging social capital will be substantially greater than it was in their grandparents’ era. One specific test of our success will be whether we can restore electoral turnout to that of the 1960s, but our goal must be to increase participation and deliberation in other, more substantive and fine-grained ways, too—from team sports to choirs and from organized altruism to grassroots social movements.*⁷⁴

There is significant anecdotal evidence suggesting, if not proving, that the ideas articulated by Putnam in *Bowling Alone* have penetrated America’s public discourse and that his civic renewal campaign has begun to have an impact on the nation’s social and political life. As evident in Figure 4, the publication of the article “Bowling Alone” coincided with a sharp rise in the frequency with which the term social capital, Putnam’s central theoretical concept, has been discussed by the American press. Whereas during the period 1985–1994 “social capital” was mentioned 60 times in major U.S. newspapers, during the subsequent ten years, 1995–2004, this term appeared in the press no less than 249 times. That a substantial part of this four-fold increase in the term’s frequency is attributable to Putnam can be inferred from the fact that his name appeared in sixty of the 249 press articles in which “social capital” was mentioned from 1995 to 2004 (but in none of those in which the term appeared in the preceding ten years).⁷⁵

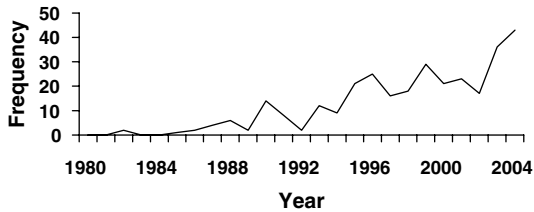
As “social capital” was being transformed from an obscure scientific concept into a popular expression and as the anxiety captured by the powerful metaphor “bowling alone” was gaining resonance in the media, it appears that Putnam’s ideas were beginning to enter the consciousness of some Americans and shape their conduct. Here are a few examples.

The game of kickball has recently experienced a major revival on the playgrounds of the Washington, DC, area, “luring legions of overworked attorneys and policy wonks and congressional aides when they have broken free of their cluttered desks.” One of them, Liz Roberto, 25, told the *Washington Post* that

74. Putnam *Bowling Alone*, 404; emphasis original.

75. To generate the frequency data I used the search engine Factiva.com, operated by the Dow Jones Corporation. Factiva.com’s category of “major U.S. news and business publications” includes some 40 newspapers and magazines “covering general news and business news that are considered key publications in their region by virtue of circulation or reputation.” The list includes, among other publications, the *New York Times*, *Wall Street Journal*, *Boston Globe*, *Miami Herald*, *Los Angeles Times*, *Newsweek*, and *Fortune*.

Figure 4
Frequency of "Social Capital" in Major U.S. News and Business Publications, 1980–2004



“we’re building social capital.” Roberto “sees a larger purpose to kickball, one that she said contradicts a book she read as a graduate student, ‘Bowling Alone,’ by Harvard professor Robert Putnam. . . . The book says ‘there are no social networks anywhere, but this proves that it still exists,’ said Roberto.”⁷⁶

Rebecca Sinkler, a former editor of the *New York Times Book Review* who retired to New Hampshire, attended a session on “social capital” sponsored by the New Hampshire Charitable Foundation. Putnam’s ideas “struck a chord” with Ms. Sinkler, prompting her to spearhead a successful community drive to avert the closing of her town’s independent general store and preserve it as a hub of the town’s social life.⁷⁷

David Crowley heads Social Capital Inc., a nonprofit organization that has been recently set up in the Dorchester section of Boston. Crowley’s goal is to “develop a broader sense of community” among residents of the area’s neighborhoods. His organization funds “social capital projects” such as “a youth council, which would train young leaders to get their peers to be more active, especially as voters.”⁷⁸

Putnam’s concern with the decline of social capital in the United States struck a chord with U.S. government officials as much as with ordinary citizens and community organizers. In November 2001, Leslie Lenkowsky “was named Chief Executive of the Corporation for National and Community Service, a federal agency that oversees 1.5 million American volunteers.” Lenkowsky previously “studied Putnam’s research carefully” and internalized his ideas. One of his first actions in office was to “preside over a community-garden groundbreaking in Miami’s Little Haiti. ‘They’re going to work together, grow real food . . .’ he says.

76. Paul Schwartzman, “Kickball’s Draw? It’s Elementary,” *The Washington Post*, October 19, 2004.

77. Shirley Elder, “A Town’s Marketing Effort: Neighbors Rescue their General Store in Center Sandwich,” *The Boston Globe*, February 25, 2001.

78. M. Robyn Jones, “A Plan for Beautiful Days in Dot Neighborhoods: Get Neighborly,” *The Boston Globe*, July 18, 2004.

“They’re going to build social capital.”⁷⁹ Lenkowsky and two presidential aides who, like him, were inspired by Putnam’s ideas—Stephen Goldsmith, a special advisor to President George W. Bush on faith-based and not-for-profit initiatives, and John Bridgeland, a former director of the White House Domestic Policy Council and former director of U.S.A. Freedom Corps—have been instrumental in implementing policies designed to increase volunteerism in America.⁸⁰ Their efforts, which were prompted by President Bush’s challenge, issued in his 2002 State of the Union Address, for every American to give two years in volunteer service, were not without success. As Robert Putnam and John Bridgeland pointed out in a recent opinion column, “the early results [of the President’s challenge] are quite promising. Peace Corps volunteers are at their highest levels in 28 years; AmeriCorps is now growing from 50,000 to 75,000 members; and a new Citizen Corps is providing an outlet for hundreds of thousands of citizens who want to help protect the homeland.” They added that the number of Americans who volunteered regularly was on the rise and that “the unprecedented increase in turnout in the election among Americans of all ages was another hopeful sign that we are shifting from a nation of spectators to a nation of citizens.”⁸¹

Finally, lest the reader form the impression that the resonance of Putnam’s views was confined to the Republican side of the aisle, the impact of *Bowling Alone* was a central theme in a *New York Times Sunday Magazine* story on the then-surging campaign of Howard Dean to win the 2004 Democratic presidential nomination. The magazine reported that “Meetup.com, the site that helped build the Dean campaign. . . takes its inspiration from books like ‘Bowling Alone’ by Robert D. Putnam about the decline of American public life; its founders claim that the regular monthly meetings arranged through its site. . . can help heal the disintegration of the American community.” The campaign, the report continued, “sees political involvement in the way ‘Bowling Alone’ does . . . People at all levels of the Dean campaign will tell you that its purpose is not just to elect Howard Dean President. Just as significant, they say, the point is to . . . get [people] out of their houses and bring them together at barbecues, rallies and voting booths.”⁸² After Dean lost the nomination to Senator John Kerry, veterans of

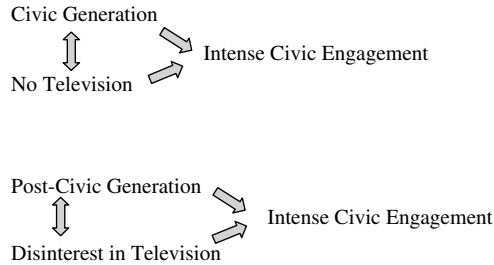
79. Leslie Norton, “Volunteers—Social Capitalists: After Years of Decline, Volunteerism Is on the Rise,” *Barron’s*, December 17, 2001.

80. Dana Milbank, “A Time to be Citizens, Not Spectators,” *The Washington Post*, March 17, 2002. Goldsmith is a participant in Putnam’s Saguaro Seminar (www.ksg.harvard.edu/saguaro, accessed on June 1, 2005). Bridgeland explicitly referred to Putnam’s ideas in the briefing he gave the press in the White House after being named Director of the U.S.A. Freedom Corps (for a transcript, see <http://usinfo.state.gov/usa/volunteer/pb013002.htm>, accessed on June 1, 2005).

81. Robert D. Putnam and John M. Bridgeland, “A Nation of Doers Need to Do More,” *Philadelphia Inquirer*, December 3, 2004.

82. Samantha M. Shapiro, “The Dean Connection,” *The New York Times Sunday Magazine*, December 7, 2003.

Figure 5
What if Young Americans Continue to Meet Putnam's Challenge?



his operation brought Putnam's theory with them to Democratic headquarters. Karen Hicks, a former Dean organizer who became national field director for the Democratic National Committee, cited *Bowling Alone* to justify the Kerry campaign's grassroots strategy: "local 'connectors' with their own 'social capital' are the best and most convincing emissaries" of Kerry's message, she told a reporter.⁸³

These examples, though they do not amount to a systematic empirical analysis, suggest that Robert Putnam's drive to revitalize American civic life is at least beginning to bear fruit. They suggest that the "desire to change" American society "present in the mind of the investigator"—Putnam, that is—"may [have been] extended, as a result of the investigation, to a sufficient number of other human beings to make it effective."⁸⁴

But what would happen to the causal claims established by Putnam's analysis if his campaign continued to make headway? What if more Americans turned their backs on their television sets and used the spare time to frequent kickball playgrounds, volunteer in their communities, or mingle with their neighbors outside their town's general store? What if the enthusiasm of the young Dean activists for "get[ting people] out of their houses and bring[ing] them together at barbecues, rallies, and voting booths" were to infect many other generation X-ers throughout the land? In that case, their changed behavior will have, in the words of Gen-X kickball player Liz Roberto, "contradicted" the causal patterns documented by Putnam's analysis in a way represented in Figure 5.

In other words, if Putnam's social reform campaign continues to gain momentum, he will have created a new social fact—growing public awareness of his thesis and the human volitions and decisions informed by this awareness. This

83. Howard Fineman, "The Ground Game," *Newsweek*, October 4, 2004.

84. Carr, *The Twenty Years Crisis*, 4.

fact will constitute a new antecedent condition for a new correlation between, on the one hand, postwar generations and an attitude of disinterest in television and, on the other hand, a *high* level of civic engagement. This new correlation will transcend and remove from actual operation, if not invalidate, the old correlation between (a) the postwar generations and television and (b) *lack* of civic engagement.

Conclusion

The relationship between purpose and analysis is, to repeat the eloquent words of E.H. Carr, far more “intimate” in political science than in the natural sciences. The fact that human beings react to certain social and historical conditions in certain ways “is not a fact comparable with the fact that human bodies react in a certain way to certain drugs. It is a fact which may be changed by the desire to change it; and this desire, already present in the mind of the investigator, may be extended, as a result of the investigation, to a sufficient number of other human beings to make it effective. The purpose is not, as in the physical sciences, irrelevant to the investigation and separable from it: it is itself one of the facts.”⁸⁵

Just as an intimate relationship between human beings may produce tension as much as harmony, so does the intimacy between political analysis and political purpose sometimes assume a disharmonious, self-disconfirming character. There are situations in which if the norms implied by political research became social facts—that is, if they were extended “to a sufficient number of other human beings to make [them] effective”—the new social fact may result in new patterns of political behavior that would no longer be consistent with the patterns established by the analysis. For example, if the challenge issued by Robert Putnam in *Bowling Alone*—“to ensure that by 2010 the level of civic engagement among Americans then coming of age. . . will match that of their grandparents when they were that same age”—were to be met, a central prediction produced by his empirical analysis will be contravened, namely the prediction that members of postwar World War II generations, partly because of their exposure to television, would scarcely engage in civic activities.⁸⁶

This putative disharmony between political purpose and political analysis constitutes one, if not necessarily the only, explanation for the failure of American political science to replicate the successes of the natural sciences, even after almost a century of striving to do so. If political scientific findings putatively shape politics in ways that remove the findings from actual operation and create new

85. Carr, *The Twenty Years Crisis*, 4.

86. Putnam, *Bowling Alone*, 404.

political patterns that contradict the old ones, then the goal of establishing a stable, cumulative body of knowledge about politics may be well-nigh unattainable.

Now, what if the knowledge claimed by this essay itself became a new social fact? If this essay were to encounter a receptive readership of political scientists, how would they react to its claim that political purpose and political analysis are putatively at odds with each other and that the tension between the two impedes the development of political science? Political scientists might react to it in two ways.

First, they could suppress the impulse to influence policymaking or to maintain a “public presence.” They could retreat to their academic cloisters, adopt technical language that is inaccessible to the general public, publish in little-read, highly specialized academic journals, and snub those colleagues who persist in political consulting, political advocacy, or op-ed writing. Such a turn inward—which critics of the profession allege it had already taken—would minimize the tension between analysis and purpose in the discipline, but it would do so at the cost of rendering political science scholarship sterile and dull.

Alternatively, political scientists could abandon their aspiration to emulate the natural sciences and turn for inspiration to various interpretive traditions—such as phenomenology, hermeneutics,⁸⁷ ethnomethodology,⁸⁸ or phronesis⁸⁹—all of which eschew the unity of science doctrine and embrace reflexivity. For these traditions, notwithstanding the differences among them, putative conflict between analysis and purpose is not a threat because they do not presuppose a fact-value separation to begin with. Of course, jettisoning the epistemological canons of positivism does not automatically enhance the relevance and “public presence” of political science—after all, reflexive research can in principle be as jargon-laden and as inaccessible to political practitioners and ordinary citizens as, say, structural equations’ models. But it does not necessarily have to be that way. The writings of sociologists Robert Bellah and Pierre Bourdieu, or urban geographer Bent Flyvbjerg, constitute examples of a social science that is both analytically rigorous and self-consciously value-laden, a socially engaged social science that has stirred and shaped public debates.⁹⁰ In fact, as Flyvbjerg pointed out, Robert Putnam’s work, too, has significant “phronetic qualities” insofar as it explicitly promotes a political vision and engages in public

87. Hans Georg Gadamer, *Truth and Method* trans. Garrett Barden and John Cumming (New York: Seabury Press, 1975).

88. Harold Garfinkel, *Studies in Ethnomethodology* (Englewood Cliffs, NJ: Prentice-Hall, 1967).

89. Flyvbjerg, *Making Social Science Matter*.

90. Robert Bellah, Richard Madsen, William M. Sullivan, Ann Swidler and Steven M. Tipton, *Habits of the Heart* (Berkeley: University of California Press, 1985); Pierre Bourdieu, *On Television* (New York: The New Press, 1998); Bent Flyvbjerg, *Rationality and Power: Democracy in Practice* (Chicago: University of Chicago Press, 1998).

political debates.⁹¹ Had Putnam self-consciously harmonized his epistemological presuppositions with his actual practices, that is, had he abandoned the presumption that his research is akin to botany or climatology, his work would have been a model of reflexive political science.

If interpretive and reflexive approaches to political science were to gain a growing presence in the discipline, my empirical observation that political science aspires to be like the natural sciences would be disconfirmed. I, for one, would welcome this development.

91. Flyvbjerg, *Making Social Science Matter*, 163.