

Introduction to the policy sciences

Political science 5076, Fall 1976

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This seminar is part of a worldwide policy movement emerging in response to the increasingly-complex problems of decision in the modern era. In the United States, the movement takes various institutional forms, including think tanks, offices of planning and evaluation, and university-based programs in public policy. The first-generation programs were set up in major universities around 1970, in a milieu of hubris about recent developments in social science. The typical program justification was that the traditional academic division of labor frustrated the integration of knowledge to improve policy decisions: Each discipline was primarily concerned with disciplinary problems of theory and method; and, in any case, no decision problem falls entirely within the boundaries of any one discipline. Despite some progress in the integration of knowledge to improve policy decisions, the first-generation programs and the policy movement as a whole are still fragmented to a significant extent by disciplinary origins, methods, and policy areas.

This seminar provides an introduction to the policy sciences, the oldest distinctive part of the policy movement. The concept of ‘the policy sciences’ was crystallized by Harold D. Lasswell in 1943. Over several decades Lasswell and his collaborators refined through practice and peer review the intellectual tools needed to support problem-oriented, contextual, and multi-method inquiry in the service of human dignity for all. In response to the requirements of practice – and with the waning of positivism in the natural and social sciences – other parts of the policy movement are gradually converging on the problem-oriented, contextual, and multi-method outlook of the policy sciences. Thus the policy sciences set the standard for the rest of the policy movement, and will continue to do so for some time. A Society for the Policy Sciences was formally established this year.

The purpose of the seminar is *not* to survey all parts of the movement or to cover the literature, although all the major parts are represented in this syllabus. The purpose of the seminar is to help you learn how to think more effectively and responsibly about any problem of decision, regardless of policy area. The tools of the policy sciences are the best available for this purpose. The specific objectives are to help you:

1. Apply the tools to define specific policy problems and to develop realistic, worthwhile, and politically-viable solutions to them.

2. Integrate knowledge about policy decision and decision process from any discipline or other source into your understanding of the policy sciences.
3. Become professional in the old sense – one who has acquired knowledge and skills critical to society *and* accepts responsibility to use them in the common interest.

These practical, intellectual, and professional objectives are mutually reinforcing. Progress on any one of them supports further progress on the others. Progress is what counts, because mastery of the policy sciences requires hard intellectual work, integrity, and practice over several years at least. This seminar is designed to help you acquire a working knowledge of the policy sciences and the motivation to learn more. The expectation that a one-semester seminar can do anything more is unrealistic and self-defeating.

- Part I develops *The Common Problem* in policy inquiry: Typically, as an analyst simplifies a policy problem, he or she misconstrues some important part of the context or overlooks it altogether, and discovers the mistake only in retrospect. Thus the primary task is to acquire facility in the use of a conceptual framework designed to help you see more of the relevant context more reliably.
- Part II reviews *The Conceptual Framework* of the policy sciences, with emphasis on conceptual models of social process and decision process for ‘mapping’ any policy context, and the problem orientation for self-orientation in the context mapped, in order to participate in the improvement of decisions. (The framework is summarized in Appendix A below.)
- Part III integrates the framework into *Central Theory*, which includes enduring propositions – empirical, normative, and practical – that have been distilled from many different contexts. The function of these propositions is to direct your attention to what *may* be important in the particular context at hand. The function is *not* to predict what will be found there, nor to prescribe what should or can be done there.

The *Conclusion* focuses on knowledge integration – an important emphasis because policy students must take a number of courses in political science and other disciplines that tend to exacerbate the common problem as defined above. Practice in knowledge integration will serve you well in these disciplinary courses and over an entire career in policy.

Seminar procedures are intended to maximize learning by example, by doing, and by comparing across policy areas. In each of the modules through Parts I, II, and III, the first meeting or two will focus on the general topic and readings assigned for that module, including one or two examples. The last meeting will be given over to presentation and discussion of seminar members’ homework applying the general material to individual term projects. Everyone will have something different to contribute from an individual term project, but everyone will also share a common basis for discussion.

The formal requirements of the seminar reflect the priority of learning by doing, with continual feedback from classmates and me. The requirements are:

1. Homework, about once a week, in the form of very short papers (1–3 pages recommended) and oral presentations on either integration or application tasks.
 - a. Integration homework this year will focus on draft chapters from my project on *Capitalizing the Policy Sciences*. The questions are intended to encourage your active engagement of the material:
 1. What did you already know about the material covered?
 2. What was important (if anything) that you learned from it?
 3. What is the most important question you have about it?
 - b. Other homework as usual applies the current intellectual tools to substantive materials in the individual term projects. For more information, see the handout on Individual Term Projects.
2. Term Project Report, due on or before the last day of classes. The report should define a problem in some policy area, recommend a solution, and justify it as realistic, worthwhile, and practical.
3. Knowledge Integration Report, due on or before the last day of classes. It should evaluate an article or chapter of your choice using the framework and propositions of central theory in the policy sciences: What's new or otherwise valuable?
4. Final Exam, a take-home due at the scheduled exam time, when the seminar will meet at my house for some holiday cheer. We might even talk about the final, which will be keyed to the practical, intellectual, and professional objectives of the seminar.

To meet these requirements each student will have to take responsibility for completing on time the required readings, which are listed below in large type, and will be distributed in seminar meetings. I have tried to keep them to a bare minimum to leave ample time for readings on the individual term project, which is an integral part of the seminar. The additional readings in small type are intended as guides to particular topics.

If you are in doubt about whether this seminar is for you, please talk with me, browse through the modules and readings, or consult the appendices to this syllabus. Appendix A summarizes the Main Seams of the Framework in the policy sciences. Appendix B summarizes Main Themes of the Seminar. Appendix C is a Short Bibliography to works that are core theory or good applications in the policy sciences, or excellent supplementary works from the policy movement. Office hours are Tuesday and Thursday, 3:30–5:30 PM, and by appointment in Ketchum 134.

The main challenge of the seminar lies in making connections between the abstract tools of the policy sciences and the particular details of a policy problem. The tools must be abstract if they are to be useful on any policy problem; but any policy problem is unique if the relevant details are taken into

account. Making connections is not easy; it requires interpretations and judgments that cannot be ‘programmed’ or automated. However, the struggle begins to pay off when the tools help you perceive more of the problem-relevant context more reliably; find better problem definitions and solutions for self-orientation in the context; and recognize overlooked patterns across contexts. Such payoffs are the key to making and sustaining good progress in the policy sciences, or in the other professions (like medicine and law) that prize or demand practice. And with practice you can become a policy scientist.

Introduction

1. *Concepts and their significance (August 27, 29)*

Any set of natural objects – for example, an orange, a baseball, a watermelon, a football – can be classified in many different ways. A concept is a mental representation of a class, and a simplification that *may* help a person cope more successfully with complex situations, given cognitive constraints. Whether a concept is successful or not depends, in general, on whether it answers to (a) the facts to which it refers and (b) the purposes to which it is put. Without a purpose, a choice among equally-valid representations is under-determined. This leads to the basic question addressed in this seminar: How can we conceive ‘decision’ and ‘decision process’ – and anything in these classes – more successfully for practical policy purposes? The basic answer is by learning how to use the conceptual and theoretical tools of the policy sciences. My draft chapter includes introductions to cognitive psychology and the policy sciences, in the context of global change policy research. Bruner (1990) is an effort to restore meaning to the center of the cognitive revolution in psychology.

Brunner, R. D. (1996), Introduction, *Capitalizing the Policy Sciences*, Ch.1 (Draft for Comments Only).

Bruner, J. (1990), The Proper Study of Man, in *Acts of Meaning*, pp. 1–32 (Cambridge: Harvard University Press).

Recommended reading: Concepts

In the pragmatic tradition of the policy sciences, the classic work on concepts is Kaplan, A. (1964), *The Conduct of Inquiry: Methodology for Behavioral Science*, Part II, pp. 34–83 (San Francisco: Chandler). The classification problem that begins the seminar comes from Alexander, C. (1965), A City Is Not A Tree, *Architectural Forum* 122 (April and May): 58–62 and 58–61, which is required reading in third module below. On the classification of natural objects, and the disturbing properties of such classifications, see Sokal, R. R. (1974), Classification: Purposes, Principles, Progress, Prospects, *Science* 185 (27 September): 1115–1123. On fuzzy-boundary concepts as mental representations of classes of natural objects, see Rosch, E. (1978), Principles of Categorization, in E. Rosch and B. B. Lloyd (eds.), *Cognition and Categorization*, pp. 27–47 (Hillsdale, NJ: Lawrence Erlbaum Associates). For an introduction to human cognitive constraints, particularly the span of short-term

memory, see Simon, H. A. (1981), *The Psychology of Thinking*, in *The Sciences of the Artificial*, 2nd ed., pp. 62–98 (Cambridge: M.I.T. Press). For an example of these ideas applied to a policy problem, see Brunner, R. D. (1986), *Case-Wise Policy Analysis: Redefining Poverty*, *Policy Sciences* 19: 201–223.

2. *The policy movement (September 3, 5)*

The first meeting will focus on the policy sciences as the oldest distinctive part of the policy movement. The memo and proposal by Lasswell (1943a, 1943b) crystallized the concept of the policy sciences. Brunner (1995) is a concise account of the policy sciences as a distinctive outlook – problem-oriented, contextual, and multi-method inquiry – in the policy movement. Brunner (1996) is an example of that kind of inquiry. The second meeting will focus on the broader policy movement, and consider whether (and if so, how) other parts of the movement are converging on the same outlook. Clark and Majone (1985: 7) propose ‘to make a start in the formulation of ... a comprehensive critical perspective’ – one that would integrate existing rational, practical, and ethical perspectives on science and technology policy analysis, and help proponents of various different perspectives become aware of other perspectives. Does this bear any resemblance to Lasswell (1943a, 1943b)?

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Lasswell, H. D. (1943a), Memorandum: Personal Policy Objectives (October 1).
 Lasswell, H. D. (1943b), Proposal: The Institute of Policy Sciences (October 1).
 Brunner, R. D. (1995), Policy Sciences, in A. and J. Kuper (eds.), *Encyclopedia of the Social Sciences*, 2nd ed. (London: Routledge).
 Brunner, R. D. (1996), Policy and Global Change Research, *Climatic Change* 32 (February): 121–147.

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Stokey, E. and R. Zeckhauser (1978), *A Primer for Policy Analysis*, Ch. 1, pp. 3–21 (New York: W.W. Norton). (Representing ‘Policy Analysis’ with origins in Economics.)
 Ruddick, W. (1980), Philosophy and Public Affairs, *Social Research* 47 (Winter): 734–748. (Representing ‘Public Affairs’ with origins in Philosophy.)
 Etzioni, A. (1990), Policy Implications of Socio-Economics, *Policy Studies Review* 9 (Spring): 445–454. (Representing ‘Socio-economics’ with origins in Sociology.)
 Dunn, W. and R. M. Kelly, eds. (1992), Introduction, in *Advances in Policy Studies Since 1950*, pp. 1–17 (New Brunswick, NJ: Transaction). (Representing ‘Policy Studies’ with origins in Political Science.)
 Clark, W. C. and G. Majone (1985), ‘The Critical Appraisal of Scientific Inquiries with Policy Implications,’ *Science, Technology, & Human Values* 10 (Summer): 6–19.

Additional reading: The policy movement

The most comprehensive account of the policy sciences is Lasswell, H. D. and M. S. McDougal (1992), *Jurisprudence for a Free Society: Studies in Law, Science, and Policy*, 2 vols (New Haven, CT and Dordrecht, The Netherlands: New Haven Press and Martinus Nijhoff Publishers), which is based on curriculum materials evolved over about a quarter century beginning in the early 1950s at the Yale Law School. A small part is assigned in the fifth module below. *Jurisprudence* was previewed in Lasswell, H. D. (1971), *A Pre-View of Policy Sciences* (New York: Elsevier). For reviews of *Jurisprudence* see Falk (1995) in the fifth module below and Brunner, R. D. (1996), A Milestone in the Policy Sciences, *Policy Sciences* 29: 45–68. For more on the policy sciences, see Ascher, W. (1987), The Evolution of the Policy Sciences: Understanding the Rise and Avoiding the Fall, *Journal of Policy Analysis and Management* 5: 367–373 and the journal *Policy Sciences*. For an overview of the policy movement, see Brunner, R. D. (1991), The Policy Movement as a Policy Problem, *Policy Sciences* 24: 65–98. For more on ‘policy analysis,’ read the rest of Stokey and Zeckhauser (1978) and see the *Journal of Policy Analysis and Management*. For more on ‘public affairs,’ see the journal *Philosophy and Public Affairs*. For more ‘socio-economics,’ see Etzioni, A. (1988), *The Moral Dimension: Toward a New Economics* (New York: The Free Press), and Etzioni, A. and P. R. Lawrence, eds. (1991), *Socio-Economics: Toward a New Synthesis* (Armonk, NY: M. E. Sharpe). For more on ‘policy studies,’ see the *Policy Review* and *Policy Studies Journal*. The classic early evaluation is Tribe, L.W. (1972), Policy Science: Analysis or Ideology? *Philosophy & Public Affairs* 2: 66–110, which unfortunately mistakes ‘policy analysis’ for the movement as a whole and mislabels it ‘policy science.’ Semi-popular and critical evaluations of the policy movement, or parts of it, include: Kupferberg, S. (1979), Teaching the Unteachable, *New Republic* (April 14): 18–21; Alter, J. (1983), Harvard vs. Democracy, *Washington Monthly* 15 (March): 32–39; Lukas, J. A. (1989), Harvard’s Kennedy School: Is Competence Enough? *New York Times Magazine* (March 12): 36f; and Skocpol, T. (1992), The Narrow Vision of Today’s Experts on Social Policy, *Chronicle of Higher Education* (April 15): B1f. See also Rivlin (1984) in the sixth module below. Vernon, R. (1985), Swan Song, *Journal of Policy Analysis and Management* 4: 573–578, characterizes the policy field as fragmented into various glens of analysts who work more or less in isolation of one another.

I. The common problem

3. The common problem: A contextual analysis (September 10, 12)

Most preventable errors of policy analysis stem from the analyst’s perspective: Typically, as an analyst simplifies a policy problem, he or she misconstrues some important part of the context or overlooks it altogether. But what is overlooked or misconstrued in the analysis nevertheless affects outcomes in the real world, and is discovered only in retrospect – after commitments have been made and action taken. The articles below document mistakes of this kind and attribute them to the analyst’s undue preoccupation with some mental construct – performance measures (Ridgeway, 1956), a logical ‘tree’ structure (Alexander, 1965), metaphors (Schön, 1979), program boundaries (Lewis, 1983), or disciplinary boundaries (Stern, 1986) – that the analyst is trained or otherwise predisposed to rely upon. In short, the common problem is that analysis is not sufficiently contextual; thus the task is to use appropriate intellectual tools that have long been satisfactory for contextual inquiry. One alternative definition of the common problem alleges that policy analysts lack satisfactory concepts or theory; if so, improvements in policy inquiry depend upon

diverting attention from applied to basic research. Other definitions allege that policy analysts lack adequate funding, access to information, or deference from the public or public officials; if so, improvements depend upon self-promotion in the policy arena.

- Ridgeway, V. F. (1956), Dysfunctional Consequences of Performance Measures, *Administrative Science Quarterly* 1: 240–247.
- Alexander, C. (1965), A City is Not A Tree, *Architectural Forum* 122 (April and May): 58–62 and 58–61.
- Schön, D. A. (1979), Generative Metaphor: A Perspective on Problem-Setting in Social Policy, in A. Ortony (ed.), *Metaphors and Thought*, pp. 254–283 (Cambridge: Cambridge University Press).
- Lewis, G. H. (1983), The Day Care Tangle: Unexpected Outcomes When Programs Interact, *Journal of Policy Analysis and Management* 2: 531–547.
- Stern, P. C. (1986), Blind Spots in Policy Analysis: What Economics Doesn't Say About Energy Use, *Journal of Policy Analysis and Management* 5: 200–227.

Additional reading: The common problem

There are many more articles and books that illustrate and extend this definition of the common problem, including the following: Betts, R. K. (1978), Analysis, War, and Decision: Why Intelligence Failures are Inevitable, *World Politics* 31: 61–79; Fischhoff, B., S. Watson and P. Hope (1984), Defining Risk, *Policy Sciences* 17: 123–140; Norgaard, R. B. and J. A. Dixon (1986), Pluralistic Policy Design: An Argument for Combining Economic and Coevolutionary Methodologies, *Policy Sciences* 19: 297–317; and Clark, T. and R. Westrum (1987), Paradigms and Ferrets, *Social Studies of Science* 17: 3–33. In 'policy studies' there is a persistent claim that we lack adequate concepts or theories, but the criteria for what is 'adequate' are left implicit or unsupportable. See for example Daneke, G. A. (1990), A Science of Public Administration? *Public Administration Review* 50 (May/June): 383–392 and Sabatier, P. A. (1991), Toward Better Theories of the Policy Process, *Political Science and Politics* (June): 144–147. For the counter-claim that concepts and theory (though improvable) were long ago satisfactory to improve policy decisions, see Lasswell, H. D. (1956), The Political Science of Science: An Inquiry Into the Possible Reconciliation of Mastery and Freedom, *American Political Science Review* 50 (December): 961–979.

4. Positivism: A diagnosis of the common problem (September 17, 19)

What accounts for the common problem? Basic psychological mechanisms tend to narrow the focus of attention by reinforcing what worked in the past; and 'what worked' may have nothing to do with improvement in policy decisions. (For example, additional publications, citations, or recognition for the analyst, or additional support for the client's predetermined policy position, may be the effective criteria of 'what worked'.) Narrowing the focus of attention is encouraged by positivism, an epistemology that often functions as a myth to guide and justify 'scientific' policy inquiry – i.e., problem-blind (value-free) acontextual (reductionist), and methodologically restricted (quantitative, for-

mal-deductive, and predictive) inquiry. The exemplar is Newtonian mechanics. Although positivism is waning, a critical understanding is still essential for assessing the justifying rhetoric of 'scientific' policy inquiry, and for choosing with your eyes open. The classic statement of positivism in the social sciences is Friedman (1953). Cronbach (1975), Ascher (1981), and Simon (1985) critique positivism as manifest in experiments, complex forecasting models, and rational choice theory, respectively. They can be read as evidence that positivism generalized to human behavior has not (and cannot) meet its own standard – which, in Friedman's account, is prediction with precision, scope, and accuracy. The current debate between positivists and post-positivists focuses on objectivity and subjectivity; the debate between Sokal (1996) and Fish (1996) is a prominent example. Bear in mind the importance of perspectives in Bruner's (1990) account of cognitive psychology in the first module and in examples of the common problem in the third module.

- Friedman, M. (1953), The Methodology of Positive Economics, in *Essays in Positive Economics*, Part I, pp. 3–43 (Chicago: University of Chicago Press).
- Cronbach, L. J. (1975), Beyond the Two Disciplines of Scientific Psychology, *American Psychologist* 30: 116–127.
- Ascher, W. (1981), The Forecasting Potential of Complex Models, *Policy Sciences* 13: 247–267.
- Simon, H. A. (1985), Human Nature in Politics: The Dialogue of Psychology with Political Science, *American Political Science Review* 79: 293–304.
- Sokal, A. (1996), A Physicist Experiments with Cultural Studies, *Lingua Franca* (May/June): 62–64.
- Fish, S. (1996), Professor Sokal's Bad Joke, *New York Times* (May 21): A13.

Additional reading: Positivism

The following is a chronological list of critiques of positivism in various forms, from a variety of disciplines: Almond, G. A. and S. J. Genco (1977), Clouds, Clocks, and the Study of Politics, *World Politics* 29 (July): 498–522; Sen, A. K. (1977), Rational Fools: A Critique of the Behavioral Foundations of Economic Theory, *Philosophy & Public Affairs* 6: 317–344; Thurow, L. C. (1977), Economics 1977, *Daedalus* 106 (Fall): 79–94, especially the section on The End of Newtonian Economics, pp. 85–86; Leontief, W. (1982), Letter on Academic Economics, *Science* (9 July): 104–105; Boudon, R. (1983), Why Theories of Social Change Fail: Some Methodological Thoughts, *Public Opinion Quarterly* 47 (Summer): 143–160; McCloskey, D. N. (1985), *The Rhetoric of Economics* (Madison: University of Wisconsin Press); Bernstein, R. J. (1985), *Beyond Objectivism and Relativism: Science, Hermeneutics, and Praxis* (Philadelphia: University of Pennsylvania Press); Torgerson, D. (1986), Between Knowledge and Politics: Three Faces of Policy Analysis, *Policy Sciences* 19: 33–59; Campbell, D. T. (1987), Guidelines for Monitoring the Scientific Competence of Preventive Intervention Research Centers: An Exercise in the Sociology of Scientific Validity, *Knowledge: Creation, Diffusion, Utilization* 8 (March): 389–430; Gould, S. J. (1989), The Burgess Shale and the Nature of History, in *Wonderful Life*, pp. 277–291 (New York: W.W. Norton); Heilbroner, R. (1991), Economic Predictions, *New Yorker* (July 8): 70–77. On the atrophy of the Newtonian model even in physics, see Horgan, J. (1992), Quantum Philosophy, *Scientific American* 267 (July): 94–104. A recent contribution in this country's major scientific journal is Oreskes, N., K. Shrader-Frechette, K. Belitz

(1994) Verification, Validation, and Confirmation of Numerical Models in The Earth Sciences 263 (4 February): 641–646. For letters on this article see *Science* 264 (15 April 1994): 329f.

5. *The policy sciences: A solution* (September 24, 26, October 1)

Alternatives to positivism reject the postulate that human behavior is determined by objective or impersonal forces. They emphasize the difference between ‘The World Outside and the Pictures in Our Heads’ (Lippmann, 1965), and the significance of the difference: We act on the simplified pictures in our heads, but the consequences of those actions in the world outside may differ significantly from what we expected because no one is omniscient. In the policy sciences, the difference takes the form of the maximization postulate, which holds that the behavior of living forms is selective according to predispositions that are to some extent incomplete, distorted, and subject to change. One implication of the maximization postulate is the principle of contextuality, which holds that the meaning or significance of anything is contingent on the context of which it is a part. Another implication is the need for an observational standpoint and conceptual tools for mapping contexts and for self-orientation in them. My draft chapter is an attempt to clarify the foundations of the policy sciences along these lines. The selection from Lasswell and McDougal (1992) is an authoritative statement from the founders. Stone (1979) is an example of the postulate (or something very much like it) in use on a particular problem. Siu (1979) presents a whimsical but profound image of the practitioner’s environment – which is not the environment imagined by positivists. Falk (1995) is a critique of McDougal and Lasswell’s policy-oriented jurisprudence by a graduate of their program.

- Brunner, R. D. (1996), Foundations, *Capitalizing the Policy Sciences*, Ch. 2 (Draft for Comments Only).
- Lasswell, H. D. and M. S. McDougal (1992), *Jurisprudence for a Free Society: Studies in Law, Science, and Policy*, Vol. I (New Haven, CT and Dordrecht, The Netherlands: New Haven Press and Martinus Nijhoff Publishers): The Maximization Postulate, pp. 368–372; Contextual Analysis (and related topics), pp. 386–397; The Value Institution Approach, pp. 375–386.
- Stone, I. F. (1979), I. F. Stone Breaks the Socrates Story, *New York Times Magazine* (April 8): 23f.
- Siu, R. G. H. (1978), Management and the Art of Chinese Baseball, *Sloan Management Review* 19: 83–89.
- Falk, R. J. (1995), Casting the Spell: The New Haven School of International Law, *Yale Law Journal* 104 (May): 1991–2008.

Additional reading: The policy sciences

There is no formal statement of epistemology in the policy sciences, which are grounded in pragmatism, the main American contribution to world philosophy. Pragmatism emphasizes experience. However, the closest approximation is Lasswell, H. D. and A. Kaplan (1950), Introduction, in *Power and Society: A Framework for Political Inquiry*, pp. ix–xxiv (New Haven: Yale University Press). On the psychological bases of the maximization postulate, see Lasswell, H. D. (1977), *Psychopathology and Politics* (Chicago: University of Chicago Press), first published in 1930; Lasswell, H. D. (1932), The Triple-Appeal Principle: A Dynamic Key, *American Journal of Sociology* 37 (January): 523–538; Lasswell, H. D. (1992), The Dynamics of Personality, in *Jurisprudence for a Free Society*, pp. 591–630; Mitchell, S. A. and M. J. Black (1995), *Freud and Beyond: A History of Modern Psychoanalytical Thought* (New York: Basic Books); and Zaleznick, A. (1996), Psychoanalysis, in A. and J. Kuper (eds.), *The Social Science Encyclopedia*, 2nd ed., pp. 684–687 (London: Routledge). For more on the difference between ‘The World Outside and the Pictures in Our Heads,’ see Lippmann, W. (1965), *Public Opinion* (New York: Free Press); Simon, H. A. (1957), Rationality and Administrative Decision Making, in *Models of Man*, pp. 196–206 (New York: John Wiley & Sons); Boulding, K. E. (1961), *The Image: Knowledge in Life and Society* (Ann Arbor: University of Michigan Press); Rappaport, R. A. (1979), On Cognized Models, in *Ecology, Meaning, and Religion*, pp. 97–144 (Richmond, CA: North Atlantic Books); and Rorty, R. (1979), *Philosophy and the Mirror of Nature* (Princeton: Princeton University Press). For approximate equivalents of the maximization postulate see Pirenne, H. (1959), What Are Historians Trying To Do? in H. Meyerhoff (ed.), *The Philosophy of History in Our Time*, pp. 87–99 (Garden City, NY: Doubleday Anchor) and von Wright, G. H. (1971), *Explanation and Understanding* (Ithaca, NY: Cornell University Press), especially on the practical syllogism. On instinctive and acquired predispositions, see Eisenberg, L. (1972), The Human Nature of Human Nature, *Science* 176 (14 April): 123–128. For another account of human nature relevant to the maximization postulate, see Lindenberg, S. (1990), Homo Socio-oeconomicus: The Emergence of a General Model of Man in the Social Sciences, *Journal of Institutional and Theoretical Economics* 146: 727–748. For additional examples of interpretation consistent with the maximization postulate, see George, A. L. (1956), Prediction of Political Action by Means of Propaganda Analysis, *Public Opinion Quarterly* 20 (Spring): 334–345; and Erikson, E. H. (1959), The Nature of Clinical Evidence, in D. Lerner (ed.), *Evidence and Inference*, pp. 73–95 (Glencoe, IL: The Free Press). On interpretation in general, see Rabinow, P. and W. M. Sullivan (eds.) (1979) *Interpretive Social Science: A Reader* (Berkeley: University of California Press), and Yanow, D. (ed.), Policy Interpretation, *Policy Sciences* 28 (Special Issue, May). On the connections between Lasswell’s contextual orientation and current intellectual trends, see Torgerson, D. (1985), Contextual Orientation in Policy Analysis: The Contribution of Harold D. Lasswell, *Policy Sciences* 18: 241–261. For additional valuable insights into Lasswell’s work, see Torgerson, D. (1990), Origins of the Policy Orientation: The Aesthetic Dimension in Lasswell’s Political Vision, *History of Political Thought* XI (Summer): 339–351 and Torgerson, D. (1992), Priest and Jester in the Policy Sciences: Developing the Focus of Inquiry, *Policy Sciences* 25: 225–235. For more on contextual mapping, see Lasswell, H. D. (1971), Contextuality: Mapping the Social and Decision Processes, in *A Pre-View of Policy Sciences*, Ch. 2, pp. 14–33 (New York: Elsevier). For more in his unique style, see Siu, R. G. H. (1979), *The Craft of Power* (New York: John Wiley & Sons).

II. The conceptual framework

6. Contextual mapping: Social process (October 3, 8, 10)

The social process model directs attention to *participants*, their *perspectives*, and the *situations* in which they interact, as well as the *base values* and *strat-*

egies they employ to shape value *outcomes*, and the longer-term *effects* of those outcomes. The eight value categories direct attention to all the significant values at stake in any particular context. Lasswell used this conceptual model to map the broadest social context, the world revolution of our time. A revolution is a change in the composition and vocabulary of the ruling few, where ‘the ruling few’ are participants identified according to their power bases, and ‘vocabulary’ refers to the most basic perspectives (key symbols of political myth) invoked to justify and explain their possession and use of power. This module emphasizes the skill revolution, which is summarized in Brunner (1996) – and more specifically, the revolution of modernizing intellectuals, including scientists, whose power base is knowledge and skill in the manipulation of symbols and whose myth prizes industrialization, modernization, and growth. Alternative constructs include deep environmentalism, fundamentalism, and the gnostic revolution – each partly a reaction against modernization. The sustainability of a world revolution, a political system (Brunner, 1994), or a social institution (Lasswell, 1970; Rivlin, 1984; Rorty, 1991) depends upon renewing faith in the underlying myth through adaptations to changing circumstances. For more on the dynamics of revolutionary and non-revolutionary change, see the ninth module below. This social process module is a good opportunity to consider your personal experience with intellectuals (including scientists) inside and outside universities, and to reconsider professional roles and responsibilities.

Brunner, R. D. (1996), Social Process, *Capitalizing the Policy Sciences*, Ch. 3 (Draft for Comments Only).

Lasswell, H. D. (1970), Must Science Serve Political Power? *American Psychologist* 25: 117–123.

Rivlin, A. M. (1984), A Public Policy Paradox, *Journal of Policy Analysis and Management* 4: 17–22.

Rorty, R. (1991), Intellectuals in Politics, *Dissent* 38 (Fall): 483–490.

Brunner, R. D. (1994), Myth and American Politics, *Policy Sciences* 27: 1–18.

Additional reading: Social process

The policy sciences literature on the world revolution of our time includes Lasswell, H. D. (1965), *World Politics and Personal Insecurity* (New York: Free Press), first published in 1935; Lasswell, H. D. (1941), The Garrison State, *American Journal of Sociology* 46: 455–468; Lasswell, H. D. (1962), The Garrison-State Hypothesis Today, in S. P. Huntington (ed.), *Changing Patterns of Military Politics*, pp. 51–70 (Glencoe IL: The Free Press); Lasswell, H. D. (1965), The World Revolution of Our Time: A Framework for Basic Policy Research in H. D. Lasswell and D. Lerner (eds.), *World Revolutionary Elites*, pp. 29–96 (Cambridge: M.I.T. Press). For an earlier summary of this literature, see Brunner, R. D. and W. Ascher (1992), Science and Responsibility, *Policy Sciences* 25: 295–331. For more on the role of scientists and other intellectuals in human development, see Eisenhower, D. D. (1961), Farewell Radio and Television Address to the American People (January 17), *Public Papers of the Presidents, Dwight D. Eisenhower, 1960*, pp. 1035–1040 (Washington, D.C.: Government Printing Office); White, L. Jr. (1962), *Medieval Technology and Social Change* (New

York: Oxford University Press); Smith, J. A. (1991), *The Idea Brokers: Think Tanks and the Rise of the New Policy Elite* (New York: The Free Press); Reich, R. (1991), Secession of the Successful, *New York Times Magazine* (January 20): 16f; Havel, V. (1992), The End of the Modern Era, *New York Times* (March 1): E15; G. E. Brown Jr. (1992), The Objectivity Crisis, *American Journal of Physics* 60 (September): 779–781, reproduced in Brown, G. E. Jr. (1993), *The Objectivity Crisis: Rethinking the Role of Science in Society*, Chairman's Report to the Committee on Science, Space, and Technology, U.S. House of Representatives, 103rd Congress, 1st Session, June (Washington, D.C.: Government Printing Office), which includes Brunner, R. D. (1993), Myths, Scientific and Political, pp. 5–12; Lasch, C. (1994), The Revolt of the Elites: Have They Cancelled Their Allegiance to America? *Harper's Magazine* (November): 39–49; and Fallows, J. A. (1996), *Breaking the News: How the Media Undermine American Democracy* (New York: Pantheon). An interesting hypothesis is presented in Fulford, R. (1992), When Jane Jacobs Took on the World, *New York Times Book Review* (February 16), p. 1f: That academic intellectuals have contributed few valuable, innovative ideas to society in recent decades, compared to other intellectuals. On the sustainability of industrialization, modernization, and growth, see in addition to the material in module nine, Heilbroner, R. (1991), Final Relections on the Human Prospect, in *An Inquiry into the Human Prospect: Looked at Again for the 1990s*, Ch. 5, pp. 153–170 (New York: W.W. Norton); Harris, M. (1991), The Industrial Bubble and Epilogue and Moral Soliloquy, in *Cannibals and Kings*, pp. 271–292 (New York: Vintage Books); Drucker, P. F. (1993), Introduction: The Transformation, in *Post-Capitalist Society*, pp. 1–16 (New York: Harper Business); and Brown, G. E. Jr. (1992), Global Change and the New Definition of Progress, *Geotimes* (June): 19–21. For more on myth, see May, R. (1991), *The Cry for Myth* (New York: W.W. Norton); Kuhn, T. S. (1970), *The Structure of Scientific Revolutions*, 2nd ed. (Chicago: University of Chicago Press); Rappaport, R. A. (1979), Adaptive Structure and Its Disorders, in *Ecology, Meaning, and Religion*, pp. 145–172 (Richmond, CA: North Atlantic Books); Schön, D. A. and M. Rein (1994), *Frame Reflection: Toward the Resolution of Intractable Policy Controversies* (New York: Basic Books); and Gitlin, T. (1995), After the Failed Faiths: Beyond Individualism, Marxism, and Multiculturalism, *World Policy Journal* XII (Spring 1995): 61–68. For more on myths and myth dynamics in the policy sciences, see the ninth module below. As a symbol specialist, a policy scientist should be acquainted with moral constraints on the use of the symbolic instruments of politics and policy, including presumptions against lying and secrecy; in this connection see Bok, S. (1978), *Lying: Moral Choice in Public and Private Life* (New York: Pantheon) and Bok, S. (1983), *Secrets: On the Ethics of Concealment and Revelation* (New York: Vintage), which are models of applied ethics. More generally, see Benveniste, G. (1984), On a Code of Ethics for Policy Experts, *Journal of Policy Analysis and Management* 3: 561–572.

7. Contextual mapping: Decision process (October 15, 17, 22)

The conceptual model of decision process directs attention to *prescriptions*, the rules enforced against challengers in particular contingencies. Whether the rules advance prescribed purposes can depend upon control of the outcomes of any phase of a complete decision process: Information, plans, or proposals in the *intelligence* phase; selections among them in the *promotion* phase; the stabilization of expectations about rules in the *prescription* phase; the determination of compliance or non-compliance in particular contingencies through initial *invocation* and final *application* of the rules; *appraisal* of the aggregate consequences of the rules and the decision process according to purposes; and *termination* of the rules, in whole or in part, if they no longer serve justifiable purposes. Decision processes are normally interrelated in series, in parallel, or hierarchically, such that one phase of a higher-order decision process is also a

whole decision process of lower-order. Lasswell (1956) is the original sketch of the conceptual model. Reisman (1981) is a valuable introduction to prescription within the decision process; the distinction between authoritative and controlling prescriptions is particularly important. Dyson (1988) explicates the evolutionary logic of the decision process. Given significant ambiguities and uncertainties in plans, and inevitable conflicts in the political arena, an effective decision process provides for the correction of mistakes: in effect, the burden of inquiry for decision shifts from the intelligence to the appraisal phase. Lasswell (1971) includes a valuable list of working criteria for appraising a decision process – a start toward filling a significant gap in the literature of the policy movement. The example this time is Brunner (1994), which analyzes interconnected decision processes and their consequences in the civil space program. Try to identify the main prescriptions that ‘anchor’ the several interdependent decision processes. In general, a large part of any political science or law curriculum can be organized in terms of decision process.

Lasswell, H. D. (1956), *The Decision Process: Seven Categories of Functional Analysis* (College Park: Bureau of Governmental Research, University of Maryland).

Reisman, W. M. (1981), Law from the Policy Perspective, in M. S. McDougal and W. M. Reisman (eds.), *International Law Essays*, pp. 1–14 (Mineola, NY: Foundation Press).

Dyson, F. J. (1988), Quick Is Beautiful, in *Infinite in All Directions*, Ch. 8, pp. 135–157 (New York: Harper & Row).

Lasswell, H. D. (1971), Professional Services: The Ordinary Policy Process, in *A Pre-View of Policy Sciences*, Ch. 5, pp. 76–97 (New York: Elsevier).

Brunner, R. D. (1994), Restructuring for Resilience: The NASA Model, *Journal of Policy Analysis & Management* 13: 492–505.

Additional reading: Decision process

Part I of *Jurisprudence for a Free Society*, pp. 3–332, by Lasswell and McDougal is titled Law as Fundamental Policy: Jurisprudence in Policy-Oriented Perspective. Part IV, pp. 1181–1262, is titled the Structure of Decision in a Free Society. It begins with a chapter on constitutive decision process and includes chapters on each of the seven phases of the ordinary decision process. Another important work on the decision process is Lasswell, H. D. (1955), Current Studies of the Decision Process: Automation vs. Creativity, *Western Political Quarterly* 8: 381–399. Contributions to the theory of prescription include Levi, E. H. (1948), *An Introduction to Legal Reasoning* (Chicago: University of Chicago Press); Sherif, M. (1967), Conformity-Deviation, Norms, and Group Relations, in *Social Interaction: Process and Products*, Ch. 10, pp. 164–189 (Chicago: Aldine); Wilson, J. Q. and G. L. Kelling (1982), Broken Windows, *Atlantic Monthly* (March): 29–38; Goldberg, V. P. (1976), Regulation and Administered Contracts, *Bell Journal of Economics* 7 (Autumn): 436–448; Vickers, G. (1987), The Psychology of Policymaking and Social Change, in G. B. Adams, J. Forester, and B. L. Catron (eds.), *Policymaking, Communication, and Social Learning: Essays of Sir Geoffrey Vickers*, Ch. 1, pp. 13–30 (New Brunswick, NJ: Transaction); Axelrod, R. (1986), An Evolutionary Approach to Norms, *American Political Science Review* 80 (December): 1095–1111; Crenson, M. A. (1987), The Private Stake in Public Goods: Overcoming the Illogic of Collective Action, *Policy*

Sciences 20: 259–276; and Kerwin, C. M. (1994), *Rulemaking: How Government Agencies Write Law and Make Policy* (Washington, DC: CQ Press). Among many interesting cases is Glicek, J. (1995), Making Microsoft Safe for Capitalism, *New York Times Magazine* (November 5): 50f. On the politics of the intelligence phase, in addition to works included in the module on social process, see Schlesinger, J. R. (1968), Systems Analysis and the Policy Process, *Journal of Law and Economics* 11 (October): 281–98; Wildavsky, A. (1967), The Political Economy of Efficiency, *The Public Interest* 8 (Summer): 30–48; and S. C. Jansen (1991), *Censorship: The Knot That Binds Power and Knowledge* (New York: Oxford University Press, 1991). On the politics of the promotion phase, see Lasswell (1977) and others in the ninth module below; Majone, G. (1989), *Evidence, Argument and Persuasion in the Policy Process* (New Haven: Yale University Press); Kolbert, E. (1992), Test-Marketing a President, *New York Times Magazine* (August 30): 18f; Kelly, M. (1993), David Gergen, Master of the Game, *New York Times Magazine* (October 31): 63f; Wells, W. G. Jr. (1992), *Working with Congress: A Practical Guide for Scientists and Engineers* (Washington, DC: American Association for the Advancement of Science); and Ansolabehere, S. and S. Iyengar (1995), *Going Negative: How Attack Ads Shrink and Polarize the Electorate* (New York: Free Press). On the politics of invocation and application, see Peters, C. and T. Branch (1972), *Blowing the Whistle: Dissent in the Public Interest* (New York: Praeger); Pressman, J. L. and A. B. Wildavsky, *Implementation* (Berkeley: University of California Press); Diver, C. S. (1980), A Theory of Regulatory Enforcement, *Public Policy* 28: 257–299; Light, P. S. (1993), *Monitoring Government: Inspectors General and the Search for Accountability* (Washington, DC: Brookings); Tarr, G. A. (1994), *Judicial Process and Judicial Policymaking* (St. Paul, MN: West); and Lane, F. S. (1994), *Current Issues in Public Administration*, 5th ed. (New York: St. Martin's). On the politics of appraisal, see Naftulin, D. H., J. E. Ware, and F. A. Donnelly (1973), The Doctor Fox Lecture: A Paradigm of Educational Seduction, *Journal of Medical Education* 48 (July): 630–635; Wildavsky, A. B. (1972), The Self-Evaluating Organization, *Public Administration Review* 32 (September/October): 509–520; Cochran, N. (1978), Grandma Moses and the 'Corruption' of Data, *Evaluation Quarterly* 2 (August): 233–261; Cochran, N. (1980), Society as Emergent and More than Rational: An Essay on the Inappropriateness of Program Evaluation, *Policy Sciences* 12: 113–129; Floden, R. and S. Weiner (1978), Rationality to Ritual: The Multiple Roles of Evaluation Research in Governmental Process, *Policy Sciences* 8: 8–18; Aberbach, J. D. (1990), *Keeping a Watchful Eye: The Politics of Congressional Oversight* (Washington, DC: Brookings); and Congressional Budget Office (1993), *Using Performance Measures in the Federal Budget Process* (Washington, DC: Congressional Budget Office). On the politics of termination, see Lemann, W. (1976), Why the Sun Will Never Set on the Federal Empire, *Washington Monthly* (September): 32–41; Bardach, E. (1976), Policy Termination as a Political Process, *Policy Sciences* 7 (June): 123–131 and other articles in the same issue; and Behn, R. D. (1978), How to Terminate a Public Policy: A Dozen Hints for the Would-Be Terminator, *Policy Analysis* 4 (Spring): 393–413. On the federal budget process see Schick A. (1990), *The Capacity to Budget* (Washington, DC: Urban Institute) and Schick, A. (1994), *The Federal Budget, 1994–95: Politics, Policy, Process* (Washington, DC: Brookings). On relationships between the structure and functioning of decision processes, see Landau, M. (1969), Redundancy, Rationality and the Problems of Duplication and Overlap, *Public Administration Review* 29: 346–358. On the basic instruments of politics, see Lasswell, H. D. (1936), *Politics: Who Gets What, When, How* (New York: McGraw-Hill).

8. *The problem orientation (October 24, 29, 31)*

Problem-defining and -solving activities entail five intellectual tasks: The clarification of *goals*; the description of *trends* with respect to goals; the analysis of *conditions* that shape trends; *projections* of possible future trends under various contingencies; and the invention, evaluation, and selection of *alternatives* for the realization of goals. Lasswell (1971) provides an overview. A problem is a

discrepancy between goals and an actual or anticipated state of affairs (trends or projections); at the risk of oversimplifying, a solution reduces the discrepancy. Campbell (1969) is a major contribution to the theory of evaluation (goals, trends, conditions), emphasizing threats to the validity of inferences about reforms. Simon (1983) reviews theories of rationality, which tend to subsume trends and conditions into projections (or the expected consequences of alternatives). The first chapter is the most important for present purposes, but other chapters on evolution and social institutions from the standpoint of rationality are also important. Kaplan (1964) and Kaplan (1963) review limits on rationality and the methodology of morals, respectively. Kaplan (1963) is important enough to be included among the works of core theory in the policy sciences, goals are clarified in the light of experience rather than assumed or taken as given. Brunner (1994) is an example that can be easily reconstructed in terms of the problem orientation.

Lasswell, H. D. (1971), Problem Orientation: The Intellectual Tasks, in *A Pre-View of Policy Sciences*, Ch. 3, pp. 34–57 (New York: Elsevier).

Campbell, D. T. (1969), Reforms as Experiments, in F. Caro (ed.), *Readings in Evaluation Research*, Ch. 18, pp. 233–261 (New York: Russell Sage Foundation).

Simon, H. A. (1983), *Reason in Public Affairs* (Stanford: Stanford University Press).

Kaplan, A. (1964), Some Limits on Rationality, in C. J. Friedrich (ed.), *Rational Decision*, Nomos VII, Ch. 4, pp. 55–64 (New York: Atherton Press).

Kaplan, A. (1963), *American Ethics and Public Policy*, pp. 90–107 (New York: Oxford University Press).

Brunner, R. D. (1994), Raising Standards: Modest Alternatives for Undergraduate Education 1 (March 31, revised).

Additional reading: Problem orientation

Standard theories of rationality in economics and psychology assume a discrete, one-time decision for purposes of theoretical convenience; behavioral theories assume a process of decisions because in practice it is difficult to get the decision right the first time or keep it satisfactory indefinitely. On this important difference, see Goldberg (1976) and Crenson (1987) in the additional readings for the previous module and Hogarth, R. M. (1981), Beyond Discrete Biases: Functional and Dysfunctional Aspects of Judgmental Heuristics, *Psychology Bulletin* 90: 197–217. For more on the behavioral theories of rationality, see Simon, H. A. (1981), The Architecture of Complexity, in *The Sciences of the Artificial*, 2d ed., Ch. 7, pp. 190–229 (Cambridge: M.I.T. Press) and Simon, H. A. (1987), Rationality in Psychology and Economics, in R. M. Hogarth and M.W. Reder (eds.) *Rational Choice: The Contrast Between Economics and Psychology*, pp. 25–40 (Chicago: University of Chicago Press). An important extension of the behavioral theories, emphasizing ambiguous goals as well as uncertain consequences, is March, J. G. (1982), Theories of Choice and Making Decisions, *Society* (November–December): 29–39. Behavioral theories are evolutionary to the extent that they de-emphasize foresight in the intelligence phase and emphasize hindsight in appraisal and termination (compare 'natural selection'). On the evolutionary interpretation of rationality, see Walbridge, C. T. (1989), Genetic Algorithms: What Computers Can Learn from

Darwin, *Technology Review* (January): 47–53; Denning, P. J. (1992), Genetic Algorithms, *American Scientist* 80 (January–February): 12–14; and Holland, J. H. (1992), Genetic Algorithms, *Scientific American* 267 (July): 66–72. For an accessible guide to the theory of evolution, see Dawkins, R. (1987), *The Blind Watchmaker* (New York: W. W. Norton). For more on the clarification of goals in the policy sciences, see Lasswell, H. D. (1970), How to Integrate Science, Morals and Politics, in *The Analysis of Political Behaviour*, Part I (Hamden, CT: Archon Books) and Lasswell, H. D. (1962), The Public Interest: Proposing Principles of Content and Procedure, in *Nomos IV: The Public Interest*, Ch. 5, pp. 54–79 (New York: Atherton Press). On problems of goal clarification and moral discourse in practice, see Schlesinger, A. M. Jr. (1989), The Opening of the American Mind, *New York Times Book Review* (July 23), p. 1f., Gabler, N. (1992), New Morality: ‘You Wouldn’t Understand,’ *Boulder Daily Camera* (June 21), p. 1Bf; and Shweder, R. A. (1993), Puritans in High-Top Sneakers, *New York Times* (September 27): A13. For more on trends, the province of history and social indicators, see Kelly, H. and A. Wyckhoff (1989), Distorted Image: How Government Statistics Misrepresent the Economy, *Technology Review* (February/March): 52–60; Innes, J. I. (1990), *Knowledge and Public Policy: The Search for Meaningful Indicators*, 2nd expanded ed. (New Brunswick, NJ: Transaction); Farley, R. (ed.) (1995), *State of the Union: America in the 1990s, Volume One: Economic Trends and Volume Two: Social Trends* (New York: Russell Sage Foundation); and Cobb, C., T. Halstead, and J. Rowe (1995), If the GDP is Up, Why Is America Down? *Atlantic Monthly* (October), pp. 60–63. Trend description is an important but often neglected task, perhaps because it appears to be mundane compared to the other tasks. On conditioning factors, the province of science, see the ninth module below on empirical theory; Trevor-Roper, H. R. (1980), *History and Imagination*, pp. 1–22 (Oxford: Clarendon Press) for a reminder that human choice is a major factor conditioning human history; and Chelmsky, E. (1991), On the Social Sciences Contribution to Governmental Decision-Making, *Science* 254 (11 October), pp. 226–231. On projections, see Ascher, W. (1978), *Forecasting: An Appraisal for Policy Makers and Planners* (Baltimore: Johns Hopkins University Press); the Conclusion, pp. 199–214, nicely summarizes this extensive evaluation of the accuracy of policy-relevant forecasts. For more on projections, see Ascher (1981) in the fourth module; Ascher, W. (1982), Political Forecasting: The Missing Link, *Journal of Forecasting* 1: 227–239; and Ascher, W. (1989), Beyond Accuracy, *International Journal of Forecasting* 5: 469–484. On alternatives, see Schön (1983) in Appendix C below; Polya, G. (1957), *How To Solve It*, 2nd ed. (Princeton: Princeton University Press); and Alexander, C. (1964) *Notes on the Synthesis of Form* (Cambridge: Harvard University Press). A 1953 classic on types of policy alternatives has been reissued: Dahl, R. A. and C. E. Lindblom (1992), *Politics, Economics, and Welfare* (New Brunswick, NJ: Transaction). A recent work is Nozick, R. (1993), *The Nature of Rationality* (Princeton: Princeton University Press).

III. Central theory

9. Empirical propositions: Social dynamics (November 5, 7)

Central theory includes the most basic and abstract propositions that have been distilled from many temporal, spatial, and cultural contexts, and are consistent with (or specifications of) the maximization postulate. These propositions tend to be forgotten in the academic division of labor, partially rediscovered, and dressed up in new vocabulary. Hence a working knowledge of the main propositions of central theory can save you time and improve the quality of your work on theoretical and practical problems – you need not take the time to reinvent the wheel or be diverted by the latest intellectual fad. These readings focus on myth and the dynamics of political and social change asso-

ciated with them. My memo reviews the concept of central theory and introduces the three chapters by Lasswell and his collaborators. In Lasswell (1977), note that activation of unconscious factors complicates democratic faith in discussion as a technique for resolving conflicts. This is an important consideration in the next module. Stanley (1995) poses an interesting problem of myth transformation; it can serve to focus our discussion and application of central theory.

- Brunner, R. D. (1996), Central Theory Seminar, Yale School of Forestry and Environmental Studies, February 13–14 (Revised).
- Lasswell, H. D., D. Lerner, and I. deS. Pool (1970), *The Comparative Study of Symbols: An Introduction*, pp. 1–26 (Stanford: Stanford University Press).
- Lasswell, H. D. (1977), The Politics of Prevention, in *Psychopathology and Politics*, Ch. X, pp. 173–203 (Chicago: University of Chicago Press). First published in 1930.
- Lasswell, H. D. (1965), Goods and Services: The Effects of Economic Conditions, *World Politics and Personal Insecurity*, Ch. VII (New York: Free Press). First published in 1935.
- Stanley, T. R. Jr. (1995), Ecosystem Management and the Arrogance of Humanism, *Conservation Biology* 9: 255–262.

Additional reading: Dynamics

Lasswell, H. D. and A. Kaplan (195), *Power and Society* (New Haven: Yale University Press) is the best summary of central theory, but highly condensed. Ch. VI, pp. 103–141 is on Symbols, including myth. Lasswell, H. D. (1965), *World Politics and Personal Insecurity* (New York: The Free Press), first published in 1935, is a major contribution to central theory that integrates ideas from Marx and Freud (among many others) to clarify the interplay between material and symbolic factors in world politics. On the dynamics of moods (symbols of relatively diffuse reference), see Lasswell, H. D. (1965), The Climate of International Action, in Kelman, H. C. (ed.) *International Behavior: A Social-Psychological Analysis* (New York: Holt, Rinehart, and Winston). For historical background on the symbolic instruments, see Lasswell, H. D., D. Lerner, and H. Speier (eds.) (1979), *Propaganda and Communication in World History*, 3 vols. (Honolulu: University of Hawaii Press). Compatible accounts of political change include Lippmann, W. (1965), The Making of a Common Will, in *Public Opinion*, Part 5, pp. 125–158 (New York: The Free Press); Schattschneider, E. E. (1975), The Contagiousness of Conflict, in his *The Semisovereign People: A Realist's View of Democracy in America*, Ch. 1, pp. 1–19 (Hinsdale, IL: The Dryden Press); and Coleman, J. S. (1958), *Community Conflict* (New York: The Free Press). For hard evidence on the importance of unconscious factors in political symbolization, see Baas, L. R. and S. R. Brown (1973), Generating Rule for Intensive Analysis: The Study of Transformations, *Psychiatry* 36 (May): 172–183. For a persuasive rebuttal to Converse's claim that mass belief systems are inconsistent and vary randomly, see Brown, S. R. (1970), Consistency and the Persistence of Ideology: Some Experimental Results, *Public Opinion Quarterly* 34 (1970): 60–68. Orwell, G. (1945), Politics and the English Language, in *Shooting an Elephant and Other Essays*, pp. 77–92 (New York: Harcourt, Brace & World), like most works from the political left, presents the key symbols of political myth as instruments of exploitation rather than as instruments of solidarity, a prerequisite for government by consent of the governed. A review article, Brunner, R. D. (1989), *Policy Sciences* 22: 83–89, argues that key symbols may serve both functions. On the uses and abuses of key symbols, see Wills, G. (1992), The Words that Remade

America: Lincoln at Gettysburg, *Atlantic Monthly* (June): 57–79, and Brunner, R. D. (1987), Key Political Symbols: The Dissociation Process, *Policy Sciences* 20: 53–76.

10. *Normative propositions: Democracy (November 12, 14)*

Normative theories of democracy that are suitable for the purpose of guiding practice accept the fact that ordinary citizens (like the experts) are boundedly rational, but capable of good judgment when they have direct experience or access to reliable facts and interpretations prepared by experts. Hence the problem of democracy is less to count public opinions through elections, polls, and other mechanisms, than to nurture opinions worth counting. The implication is that experts (symbol specialists if not modernizing intellectuals) are in a position to exploit the public or to recognize that a preference for democracy entails a professional responsibility to advise and formulate alternatives for the public on the most important decisions. Brunner (1995) is an outline of Lasswell's contributions to the theory and practice of democracy. Over the decades realist theories of democracy have been worked out in various ways and in various vocabularies by Lippmann (1965), Schattschneider (1975), and Dahl (1970), among others. Dryzek and Torgerson (1993) is a self-described 'progress report.'

Brunner, R. D. (1995), Harold D. Lasswell, in S. M. Lipset (ed.) *The Encyclopedia of Democracy*, Vol. III, pp. 723–725 (Washington, DC: Congressional Quarterly Press).

Lippmann, W. (1965), The Image of Democracy, in *Public Opinion*, Part 6, pp. 161–184, 195–197 (New York: The Free Press).

Schattschneider, E. E. (1975), The Semisovereign People, in *The Semisovereign People: A Realist's View of Democracy in America*, Ch. 8, pp. 126–138 (Hinsdale, IL: The Dryden Press).

Dahl, R. A. (1970), Three Criteria for Authority, in *After the Revolution?*, Ch. 1, pp. 3–58 (New Haven: Yale University Press).

Dryzek, J. S. and D. Torgerson (1993), Democracy and the Policy Sciences: A Progress Report, *Policy Sciences* 26: 127–137.

Additional reading: Democracy

For other work on the same basic ideas, see Key, V. O. (1966), The Voice of the People: An Echo, in *The Responsible Electorate*, Ch. 1, pp. 1–8 (Cambridge: Belknap Press of Harvard University Press); Kang, S. (1979), Graham Wallas and Liberal Democracy, *Review of Politics* 41 (October), pp. 536–560; Yankelovich, D. (1991), *Coming to Public Judgment: Making Democracy Work in a Complex World* (Syracuse, NY: Syracuse University Press); and the remainder of the special issue of *Policy Sciences* introduced by Dryzek and Torgerson in the article assigned above. For the culmination of Dahl's work on democratic theory see Dahl, R. A. (1989), *Democracy and Its Critics* (New Haven: Yale University Press). Socrates is the prototype of the intellectual who dismisses the demos as an

ignorant herd and acts accordingly; Stone, I. F. (1988), *The Trial of Socrates* (New York: Doubleday Anchor) is the authoritative account and a cautionary tale for aspiring policy intellectuals. Some still believe that ordinary citizens can understand issues beyond their direct experience spontaneously, without expert help. This belief probably persists because it affirms a naive democratic faith, and perhaps because it helps specialized elites avoid their responsibilities to the general public. See Westbrook, R. B. (1991), *John Dewey and American Democracy* (Ithaca, NY: Cornell University Press). Recently, the theme of civic engagement in deToqueville's account of *Democracy in America* has been revived by Putnam, R. D. (1995), *Bowling Alone: America's Declining Social Capital*, *Journal of Democracy* 6 (January): 65–78.

11. *Methods: Prototyping (November 19, 21)*

Methods are the key to making the connections between abstract propositions of central theory (empirical or normative) and specific contexts of application. Lasswell (1971) provides a concise summary of methods that are relatively distinctive in the policy sciences. Readings in this module focus on one of these methods, prototyping. The leading example is the prototype at Vicos – a Peruvian hacienda in which Holmberg, Lasswell, Doughty, and others initiated a self-sustaining process of value accumulation and enjoyment beginning in the 1950s. Brunner and Clark (1996) is an extension of prototyping to ecosystem management.

Lasswell, H. D. (1971), Diversity: Synthesis of Methods, *A Pre-View of Policy Sciences*, Ch. 4, pp. 58–75 (New York: Elsevier).

Lasswell, H. D. (1965), The Emerging Policy Sciences of Development: The Vicos Case, *American Behavioral Scientist* 8 (March): 28–33.

Holmberg, A. R. (1974), The Role of Power in Changing Values and Institutions of Vicos, in H. F. Dobyns, P. L. Doughty, and H. D. Lasswell (eds.) *Peasants, Power, and Applied Social Change: Vicos as a Model*, Ch. II, pp. 37–63 (Beverly Hills, CA: Sage).

Doughty, P. L. (1987), Vicos: Success, Rejection, and Rediscovery of a Classic Program, in E. M. Eddy and W. L. Partridge (eds.) *Applied Anthropology in America* 2nd ed., Ch. 19, pp. 433–459 (New York: Columbia University Press).

Brunner, R. D. and T. W. Clark (1997), A Practice-Based Approach to Ecosystem Management, *Conservation Biology* (forthcoming).

Additional reading: Methods

For more on Vicos see the rest of Dobyns *et al.* (1974) cited above and Doughty, P. L. (1987), Against the Odds: Collaboration and Development at Vicos, in D. D. Stull and J. J. Schensul (eds.) *Collaborative Research and Social Change: Applied Anthropology in Action*, Ch. 6, pp. 129–157 (Boulder: Westview Press). For more on prototyping in the policy sciences, see Lasswell, H. D. (1963), Experimentation, Prototyping, Intervention, in *The Future of Political Science*, Ch. 5, pp. 95–122 (New York: Atherton Press); Lasswell, H. D. and R. Rubenstein (1966), An Application of the

Policy Sciences Orientation: The Sharing of Power in a Psychiatric Hospital, in J. A. Robinson (ed.) *Political Science Annual: An International Review*, vol. 1, pp. 191–238 (Indianapolis, IN: Bobbs-Merrill); Lasswell and Rubenstein (1966) in Appendix C; and Brunner, R. D. (1980), Decentralized Energy Policies, *Public Policy* 28 (Winter): 71–91. Context-sensitive methods are those in which the context of each observation – and therefore its meaning or significance – is allowed to vary as data. Included among the context-sensitive methods are Q-methodology, for which the authoritative guide is Brown, S. R. (1980), *Political Subjectivity: Applications of Q Methodology in Political Science* (New Haven: Yale University Press); cluster analysis, exemplified by Brunner, R. D. (1983), Case-Wise Policy Analysis: Another Look at the Burden of High Energy Costs, *Policy Sciences* 15: 115–135; and concordances, exemplified by Brunner, R. D. (1987), Key Political Symbols: The Dissociation Process, *Policy Sciences* 20: 53–76. On fallacies in the use of conventional context-insensitive methods for theoretical (as opposed to descriptive) purposes, see Brunner, R. D. and K. Liepelt (1972), Data Analysis, Process Analysis, and System Change, *Midwest Journal of Political Science* 16 (November): 538–569. On rational choice ‘theory’ see Cushman, R. (1994), Rational Fears: Political Science’s Ascendant Methodology, *Lingua Franca* (November/December): 42–54. On what might be called ‘reflexive methods’ – those used on the researcher himself or herself – see Lasswell, H. D. (1970), Self-Observation: Recording the Focus of Attention, in *The Analysis of Political Behaviour*, pp. 279–286 (Hamden, CT: Archon Books); and Lasswell, H. D. (1977), A New Technique of Thinking, in *Psychopathology and Politics*, Ch. III, pp. 28–37 (Chicago: University of Chicago Press).

Conclusion

12. Knowledge integration (November 26; December 3, 5, 10)

The task is to consider an article, chapter, or book systematically in terms of an explicit observational standpoint (human dignity for all is the recommendation) and central theory in the policy sciences (the maximization postulate and related propositions, social process, decision process, and problem-orientation). For each work, the main questions are: What’s covered and what isn’t? What do I already know about this? What’s the contribution, the value-added, here? It is normally more constructive to focus on what you can use rather than what you cannot. (Indiscriminate use of a symbolic axe to slay every potential rival does not take us very far toward professional responsibility and effectiveness, even if it is emotionally gratifying.) For the first one or two meetings in this module, the seminar will focus on *selections* from the following in order to practice knowledge integration, and perhaps to learn more about the convergence hypothesis. For the remaining meetings, we will consider your reports on works of your own choice. (Please include a copy of the work chosen with your final report.)

Weber, M. (1949), ‘Objectivity’ in Social Science and Social Policy, in E. A. Shils and H. A. Finch (trans. and eds.), *Max Weber on the Methodology of the Social Sciences*, pp. 49–112 (Glencoe, IL: Free Press). Original publication in 1904.

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- Putnam, R. D. (1995), Bowling Alone: America's Declining Social Capital, *Journal of Democracy* 6 (January): 65–76.
- Pogrow, S. (1996), Reforming the Wannabe Reformers, *Phi Delta Kappan* 77 (June): 656–663.

Final exam

Friday, December 13, 7:30–10:30 PM

Appendix A. Main seams of the framework

<i>Postulate</i>	Living forms are predisposed to complete acts in ways that are expected to leave the actor better off than if they had been completed differently.
<i>Values</i>	<i>Illustrative outcomes / institutions</i>
Power	Decision, victory, defeat / Government, law, parties.
Enlightenment	Insight, discovery, news, censorship / Research centers, mass media.
Wealth	Income, ownership, bankruptcy / Markets, banks, factories.
Well-being	Safety, health, comfort, insecurity / Hospitals, recreational facilities.
Skill	Performance, proficiency, clumsiness / Schools, studios.
Affection	Intimacy, friendship, loyalty, hatred / Families, friendship circles.
Respect	Recognition, prestige, discrimination / Social classes, castes.
Rectitude	Morality, immorality / Religious, ethical associations.
<i>Social process</i>	<i>Components</i>
Participants	Individuals, groups / Official, non-official / Value shapers, sharers / Elite, rank-and-file, mass.
Perspectives	Value demands, identifications, and expectations / Myths (doctrine, formula, miranda).
Situations	Organized, unorganized / Territorial, pluralistic / Value inclusive, exclusive / Crisis or inter-crisis.
Base Values	Value assets, liabilities/Perspectives, capabilities.
Strategies	Coercive, persuasive / Communicative (diplomacy, propaganda), collaborative (military, economic).
Outcomes	Value indulgences, deprivations / Decisions, choices.
Effects	Value accumulation, enjoyment, distribution / Institutional changes.
<i>Decision process</i>	<i>Processes / outcomes by phase</i>
Intelligence	Gathering, processing, and dissemination of information for decision; plans.
Promotion	Adding intensity to the dissemination of value demands; selection among demands.
Prescription	Stabilizing expectations on norms to be severely sanctioned if challenged in various contingencies; 'legislation.'
Invocation	Initially characterizing a concrete situation in terms of conformity or non-conformity with prescription; policing.
Application	Finally characterizing a concrete situation in terms of conformity or non-conformity to prescription; adjudication.
Appraisal	Characterizing the aggregate flow of decision according to policy objectives, and identifying formal and effective responsibility for successes and failures; evaluation.
Termination	Cancelling a prescription and dealing with the claims of those who acted in good faith under it; an ending.
<i>Problem-orientation</i>	<i>Questions / tasks</i>
Goals	What future states are to be realized as far as possible in social process? Goal clarification.
Trends	To what extent have past and recent events approximated goals? Trend description.
Conditions	What factors have conditioned the direction and magnitude of trends described? Analysis of conditions.
Projections	If current policies are continued or modified, what would be the probable future of goal realizations? Projections.

Alternatives What intermediate objectives and strategies will optimize the realization of goals? Invention, evaluation, and selection of alternatives.

Adapted from Lasswell, *A Pre-View of Policy Sciences*, Chs. 2 and 3.

Appendix B. Main themes of the seminar

This is a checklist of main themes to be understood in considerable detail by the end of the term, and a guide to questions and priorities during the term. This is also counselling tool, to help people decide whether or not to take this seminar. Notice that various themes are likely to contradict what you have learned (or assumed) in your formal education.

The profession

1. The policy movement is comprised of many parts which differ in origins, outlooks, and practical impact, but share the common (although ambiguous) aspiration to improve policy decisions through scientific inquiry.
2. One part of the movement, the policy sciences, holds that most preventable errors of analysis stem from the analyst's perspective: Typically, some important part of the context is misconstrued too narrowly or overlooked altogether.
3. Positivism predisposes such errors because it is acontextual in its generalization of universal laws of behavior to living forms, its overreliance on quantitative and formal methods, and its avoidance, in principle, of normative issues.
4. The policy sciences are based on the postulate that behavior is selective from the actor's own subjective viewpoint, employ multiple methods for problem-oriented and contextual inquiry, and recommend human dignity as the overriding aim of policy.
5. Progress depends upon distinguishing the main parts of the movement and appraising their performance relative to each other and to the common aspiration. Specify, do not assume, what it means 'to improve policy decisions through scientific inquiry.'

Theory

6. Post-positivist theory in the policy sciences abstracts similarities from many different contexts of experience, but does not and cannot characterize any particular context unambiguously, or comprehensively, or forever.
7. Normative and empirical theory alike are grounded in diverse experiences, but the former abstracts value preferences while the latter abstracts patterns of behavior without expressing preferences. Practical maxims abstract rules for operations.
8. The function of theory, from a post-positivist standpoint, is to direct attention to the relevant aspects of any particular context. The function is not to describe what should be found there, nor to predict what will be found there, nor to prescribe what to do there.
9. Central theory in the policy sciences has long been satisfactory to perform this heuristic function, even though it can be improved. Most claims of theoretical progress are refinements or innovations in the vocabulary of central theory.
10. The meaning and relative significance of a theoretical proposition is contingent on the particular context, not universal. Hence observation and interpretation of the particular context are unavoidable and critical, and reasonable and qualified people may differ.

Practice

11. Behavior is not determined in the sense of Newtonian mechanics. An observed pattern of behavior is interpreted as the coordination of individual acts, each based on the subjective map an actor constructs of the self in the context.
12. Value preferences are too often taken as given in contemporary policy analysis, misused as rationalizations for hidden interests in promotional politics, and reduced to wealth and power considerations in the culture.
13. For problems fraught with uncertainty and ambiguity, rationality is more procedural than substantive, and decision process properly emphasizes appraisal of many trials and termination of the failures over policy planning.
14. Symbols are probably the most significant factors and instruments shaping social process, but they are under-estimated and under-studied relative to the material factors by participants in the policy movement.
15. The politics of our time are distinguished by the rise of modernizing intellectuals, including scientists. Their power base is knowledge and skill, their technique is symbol manipulation, and their net impact on human dignity is still in doubt.

Appendix C. Short bibliography

Core theory

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The last word

Men are apt to deceive themselves upon general matters, but not so much when they come to particulars... The quickest way of opening the eyes of the people is to find the means of making them descend to particulars, seeing that to look at things only in a general way deceives them.

–Machiavelli, *Discourses*, I