

Sustainability of the policy sciences: Alternatives and strategies

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Many aspects of Roger Pielke's analysis (Pielke, 2004) resonate with my personal experiences and my observation of trends and conditions in the policy movement, academia and the policy sciences.¹ This includes the external factors (related to prediction, axiology of science and politicization of science); the internal factors (related to paucity of centers for graduate training, materials and pedagogy and misinterpretation of our identity); the unique role of policy scientists as mappers, integrators and clarifiers committed to the pursuit of human dignity and common interests; the "dual life" of most current policy scientists; and the need for change to emanate from within the policy science community itself, if progress is to be made in reaching its goals.

My comments seek to expand upon, and in some cases re-interpret, several aspects of the current context discussed in Pielke's paper. In an overall sense these relate to the goals of the policy science community, the trends and conditions affecting progress or prospects for moving toward our goals, "sustainability of the policy sciences" as one alternative for pursuing those goals and factors in the social process that should guide our strategies in the coming years.

Goals and alternatives

Although Pielke's paper does not explicitly state how sustainability of the policy sciences tradition relates to the goal of the policy sciences community, this relation can be readily deduced. In the "Alternative Futures" section he states: "To the extent that the policy sciences tradition offers a set of powerful tools with potential to improve decision making and the further realization of human dignity, threats to the tradition's sustainability are indeed problematic" (p. 12). Thus, it appears the overall goal is to improve human dignity, the instrumental goal for the policy science community is to contribute to this by improving the base of intelligence for decision-making, and the instrumental goal for achieving that is to ensure the sustainability of the distinctive policy sciences tradition. Pielke goes on to suggest several strategies for ensuring sustainability, most notably institutionalizing (like a discipline or profession) in order to develop and nurture future generations of policy scientists.

In keeping with sound policy sciences practices, Pielke bases his prescriptions on a consideration of trends and conditions in the policy movement and academia. However, my consideration of these elements leads to somewhat different conclusions, as described later.

Trends and conditions

Pielke correctly identifies three of the external threats to the sustainability of the policy sciences tradition (reverence for prediction, axiology of science and politicization of science); however, he does not adequately discuss some favorable trends and conditions. These include a growing awareness of: the limited ability for prediction in many sciences and policy contexts (NRC, 1978; Hammond, 1996; Peat, 2002); the nature, sources and implications for policy making of scientific uncertainty and ignorance (Von Schomberg, 1993; NRC, 1994; Klinke and Renn, 2002); the socially constructed nature of scientific knowledge, especially in policy contexts (Kuhn, 1962; Bobrow and Dryzek, 1987; Hoffman, 1989; Jasanoff, 1990; Chambers, 1997); the fundamental importance and socially constructed nature of problem definition (Dery, 1984; Rochefort and Cobb, 1994; Dunn, 2004); the extent and diverse ways in which science and other forms of intelligence is used, misused and distorted in policy making (Barker and Peters, 1993; Dickson, 1984; Williams, 1998; Bamford, 2004); the need for multi-disciplinarity and diverse forms of knowledge for policy (Tenner, 1996; Bovens and Hart, 1998); the limitations and pitfalls of over-reliance on rational and technocratic approaches for policy analysis and prescription (Lindblom, 1993; Majone and Quade, 1980; Fischer, 1990; Chetkovich and Kirp, 2001; Romero, 2001); the benefits of broader public participation in policy analysis and an increasingly sophisticated set of social technologies and governance arrangements for engaging the publics (NRC, 1996; Renn et al., 1995; Peters, 1996; Bogason, 2000); the importance of appraisal and adaptive management as fundamental components of the policy process (Johnston and Clark, 1982; Osborne and Gaebler, 1992; Meffe et al., 2004); the re-conceptualization of the ends and means of development (Sen, 1999; World Bank, 2000; UNDP, 2003) and many other features of the policy process as long-recognized in the policy sciences tradition. "Awareness" of these features is most evident in academic writings, and in the creation of entirely new academic specialties such as science and technology studies, but is not limited to those sources. It also is evident (to widely varying degrees) in the writings and practices of some government agencies, professional organizations, expert committees, as a minority voice in some academic disciplines, in communities and in the popular media.

The point of highlighting these incipient trends is not to exaggerate their prevalence, and certainly not to suggest that governments, professional organizations, mainstream policy analysts or others have uniformly and eagerly embraced the implied reforms. Rather, these trends merely call attention to the fact that some of the social and decision processes well recognized in the policy sciences tradition are gaining recognition well beyond our small community, albeit in a fragmentary way and still to a woefully inadequate degree. The main significance of this is strategic and political. That is, these trends represent strategic openings to be encouraged and built upon by people in diverse fields who favor improved decision processes (including, but not limited to the policy science community); they represent perspectives to which a growing number of undergraduate, graduate and early/mid-career professionals may be exposed; and they increase the pool of people who, once exposed, may value and seek more comprehensive and systematic treatment of these issues, as offered by the policy sciences and sure to be re-invented to varying degrees by others.

Pielke does address this issue in a limited way in his “Alternatives” section. Quoting Ascher and Brunner (1995), Pielke states:

Tendencies toward convergence are grounds for optimism about the long-term future of the policy sciences. The conceptual and theoretical tools of the policy sciences (or their functional equivalents) will tend to be rediscovered by reflective practitioners as an adaptation to the requirements of practice; and the various partial alternatives may eventually give way to a policy sciences outlook in professional schools that take the requirements of practice seriously.

Unfortunately, Pielke does not elaborate on the extent of this “partial convergence” and carry it through in his analysis and promotion of alternatives.

While the tendencies toward convergence noted by Ascher and Brunner, and elaborated upon here, may be grounds for optimism, a robust problem analysis also should take note of some additional trends and conditions pushing in the opposite direction. In addition to the factors noted by Pielke, this includes declining state and federal financial support for universities (Chronicle of Higher Education, 2004; NASULGC, 2004); increased emphasis on science, technology and external grants and the relative neglect of social science and humanities in government science policy and university priorities (Montgomery, 2003); increasing reliance of universities on corporate funding for research and corporate influence over research agendas at universities (Bok, 2003); the politicization of science and analysis within government agencies (Union of Concerned Scientists, 2004); and, as noted by Pielke, an increasing involvement of narrowly focused natural scientists as policy advocates. In short, trends in the political economy of research universities and government research agencies favor more narrow and reductionistic research and outlooks, rapid translation of knowledge into new technologies and market opportunities, and little interest in or incentives for analysis or intelligence that examines or questions the implications and wisdom of these overall trends. Insofar as a policy sciences analysis of this situation, or specific manifestations of it (such as biotechnology, environmental research, etc.) is likely to identify and call into question these trends and practices, the receptivity toward or even tolerance of the policy sciences in academia and government may be shrinking rather than expanding.

Alternatives re-visited

After considering the three external and internal threats to the sustainability of the policy sciences tradition, and the distinctive character and orientation of the policy sciences, Pielke promotes a single, clear alternative: “To sustain, in short, the policy sciences must become institutionalized like a conventional discipline.” Pielke’s major concern, it seems, is that training centers must exist to ensure a steady supply of well-trained policy scientists on into the future. Ironically, the only other alternative he considers is to change some of the external forces to make the world more receptive to the policy sciences, which he concludes is worthy but “neither necessary nor sufficient to address the common problem.” For reasons described later, institutionalization of

the policy sciences may be a useful instrumental goal, but itself is neither necessary nor sufficient.

The goal of the policy sciences community is to improve the base of intelligence for decision-making and the further realization of human dignity. Pielke's institutionalization recommendation runs the risk of goal substitution. In other words, it assumes that preserving the policy sciences tradition in an institutionalized form is a necessary (and sufficient) means to this end. This assumption deserves careful scrutiny.

Is it possible, for instance, that the shared goal of improving the intelligence function in the large, heterogeneous and highly dispersed universes of academic and professional public policy might be best served by supporting and broadening the "awakening" processes already underway in disparate regions of these universes, rather than seeking to institutionalize and create a distinct pipeline (and identity) for the formal policy sciences tradition *per se* in a relatively small number of academic centers? Is it hubris on our part to contemplate that we could effect large-scale change in these diverse and powerful epistemic and practice communities by creating a few training centers and a policy sciences profession or discipline that would implicitly compete with the more established traditions? If ownership of ideas and identification with one's own tribe or tradition is an important element of sustainability, especially in academia, would a more effective political strategy for achieving our goals be to help members of those tribes incorporate and feel ownership over the key concepts, principles and tools of the policy sciences as part of their awakening process?

A second alternative

Rather than following a "centralized" model, in which an undefined number of academic centers become the site for training future generations of policy scientists, an alternative could be a distributed or network model. Under this alternative, the objective would be to expand the number of academic "policy" departments or programs that have at least one policy scientist on their faculty, and to have an even larger number of specialized departments or programs with at least one policy science-oriented faculty member (e.g., in natural resources, environment, science and technology studies, engineering, public health, etc.). These policy scientists could continue to live dual lives if necessary, as many of the current policy scientists do, and derive professional, intellectual and personal support from a society for the policy sciences and/or other structures as at present. Although leading dual lives in this context may not be optimal, the existence of multiple and conflicting roles and identities is a defining feature of modern life, including in many professions, and by itself is not a sign of unsustainability.

Comparison of alternatives

The centralized model would follow a familiar academic model for producing and reproducing a professional cadre with a particular outlook and approach to knowledge and practice. It would permit a predictable foundation for training policy scientists, permit a critical mass of policy scientists to form in a small number of centers and help create, expand and maintain a distinct identity, reputation and visibility for the policy

sciences. On the downside, it may be difficult to establish and sustain in academic settings (for reasons given) and may leave the policy sciences community critically dependent on a small number of centers (as at present).

The distributed model is more dispersed, intellectually isolating (outside of networking activities with policy scientists from other institutions) and highly dependent on the personal commitments and perseverance of individual policy scientists. It may be more feasible to create (since no one department must dedicate multiple faculty lines for policy scientists); more expandable (if, as Pielke suggests, current trends cause increasing numbers of specialized departments and programs to seek a faculty with this orientation); and more sustainable (since the policy sciences tradition would not be dependent on a small number of training centers). In short, the distributed model could exploit many of the advantages of other distributed systems (redundancy, adaptability, expandability, resilience) but would still need to solve problems related to communication, fragmentation, identity and collective action.

Despite the clear differences between these two models, the most important conclusion from this comparison may be that the optimal arrangement is a mixed model or combination of these two strategies, i.e., neither one precludes the other and, in fact, they complement each other quite well.

A further difference between these two alternatives relates to the nature and extent of the convergence trends. As noted, if the goal of the policy sciences is to improve the intelligence function in as many fields of policy as possible, perhaps our strategies should be based on a serious consideration of these positive trends already underway, the situations and settings in which these trends are (and are not) occurring, the sources of and reasons for resistance and support and some features of our own community (as a participant in this process) that may enhance and inhibit our ability to support and broaden those trends.

Strategies in a social context

A danger in accepting the “mixed models approach” outlined earlier is its strong resemblance to the status quo in the current policy sciences community. However, a decision to accept this model does not necessarily imply accepting the current strategies we deploy to pursue our goals. Based on Pielke’s analysis and a further analysis (later) of the social context in academia, the policy movement, the policy sciences community and society at large, it is possible to identify a number of potentially fruitful strategies. These possibilities are intentionally modest and incremental, taking account of the actual situations and base values available to the current policy sciences community, as opposed to a bold and visionary plan that may not be achievable or even pursuable given our current capacity.

Social context

A useful starting point in strategy development is to consider how our base and scope values relate to those of others in the relevant social context. Our most important base value (in our view) is a particular form of intelligence and skill in the analysis of problems and pursuit of human dignity. Importantly, this involves an outlook and

approach that is *comprehensive and integrative*, rather than partial and specialized. Our scope values include a concern for all eight-value categories that, together, comprise human dignity. Importantly, this implies scope values that are *inclusive and transcendent* rather than narrow or specialized. Therefore, our outlook, approach and goals all place us in a complementary rather than competitive relation to other approaches in the policy movement.

While our complementary rather than competitive relation to others may be true in concept, it is seldom true in practice. Some important obstacles in academia and the policy movement are: specialization in outlook, approaches and identities; goal displacement (e.g., conforming to disciplinary norms and standards rather than commitment to a problem orientation; the importance of respect seeking and how it is allocated; conforming to demands and expectations of clients and funders); weak awareness of self-in-situation; and lack of awareness of, interest in or agreement with our strong claims regarding the unique and valuable contributions of the policy sciences. Some of the features or perceived features of our community that may inhibit broader awareness, acceptance and embrace of our outlook and approach might be: a strong and insular community identity tied to historical giants rather than contemporary luminaries; an approach (and language) variously misperceived as outdated, over-simplified, rationalistic and specialized, if not arcane; and our tradition of conducting our primary intellectual and community-building activity (the annual institute) outside of mainstream venues. All of these external and internal factors, and others not mentioned here, require attention in our strategy development, regardless of whether they are real or perceived and mutually consistent or contradictory.

Objectives and strategies

Our shared goals and the realities of our social context imply several distinct objectives, some of which are in tension with one another. What follows is best viewed as the outlines of a feasible 10-year plan.

One objective is to preserve the core features of the policy sciences approach as a comprehensive, integrated set of concepts and tools (“the framework”) *for future generations of academics and practitioners*, staying as close as possible to the original materials of Lasswell, MacDougal and their immediate successors. The efforts underway to create the virtual library and archive is one strategy to fulfill this objective.

A second objective is to make the framework more accessible to current and future generations of *specialized professionals*, by translating it into more current terms and concepts and providing examples in their particular policy domains. Clark’s textbook (2001) is one example of this, and is most relevant for natural resource professionals. Similar textbooks could be produced specific to other policy domains, such as engineering, public health, social welfare, city and regional planning and others, possibly by directly adopting much of Clark’s text and modifying the subject matter examples to suit other policy domains. A complementary strategy would be to organize summer workshops for university faculty in each of these specialty areas who may have an interest in the approach but do not have sufficient background to do so with confidence. Such workshops might be co-sponsored by the relevant professional

societies (e.g., American Public Health Association, American Society for Nutritional Sciences, etc.).

A third objective is to demonstrate the integrative and multidisciplinary nature of the framework for *policy-related academics and professional societies* and make it more attractive for use as a companion text in many graduate training courses. This could be done by explicitly linking its various dimensions, elements and principles to some of the current theories, models and frameworks in the fields of political science (and political sociology, psychology, communication, etc.), public administration, planning, organizational behavior, policy analysis, decision sciences, evaluation, science and technology studies and others. This could be done at the theoretical/conceptual level or (more productively) through the comparative analysis of case studies using two or more approaches. The strategic intent here is not only to demonstrate the integrative nature of the policy sciences framework, but to pay due respect to the detailed and specialized (but partial and often context-dependent) works from allied disciplines and create an intellectual bridge between their frameworks and that of the policy sciences. This also would afford the opportunity to provide evidence supporting our strong claims regarding the comprehensive, integrative and ultimately more practical qualities of the framework. To be most effective, this objective should be pursued through collaboration with respected academics in each of the allied disciplines, thereby increasing their understanding, support and promotion of the effort within their own disciplines. In recognition of another trend in academics (web-based information storage and learning), a web-based version of these materials might be the strategically most useful format.

A fourth objective is to increase awareness, understanding and interest in the policy sciences on the part of policy-related disciplines (political science, etc.) as well as policy specialties (environment, public health, social welfare, etc.). The strategic intent here relates to recruitment into the policy sciences way of thinking (if not the Society), increasing the demand for policy scientists as faculty members and increasing the use of policy science materials (as earlier) in related courses. This could be achieved by policy scientists becoming more active in the affairs of those professional societies and consciously conducting promotion in those circles, among others. The paper by deLeon and Steelman (2001) published in the Curriculum and Case Notes section of JPAM is one example. It also could be achieved by holding the annual institute as part of the annual meeting of other professional societies on a regular basis (e.g., every other year).

A fifth objective is to provide an effective intellectual, professional and social support system for those policy scientists pursuing a “dual life,” in which the policy sciences is in constant tension with other professional identities, outlooks and approaches. This might be pursued through the annual institutes (as at present), as well as summer institutes on specific themes, collaborative projects (such as the writing projects suggested earlier) and other approaches not crystallized.

Finally, a sixth objective is, indeed, to seize every opportunity to develop centers of strength in the policy sciences in academic settings, to provide a measure of stability and reliability in the training pipeline and perhaps institutional support for many of the other activities suggested here and in the future. Although such opportunities may be few in number, based on current conditions, large numbers are not

necessary for the purpose of achieving complementarity and synergy with these other objectives and activities.

Conclusion

An important message that flows from the logic of the present analysis is that the goals of the policy sciences community might be served by, first, agreeing on the most appropriate version of the problem analysis and set of alternatives. But, as importantly, we must then begin to think and act as strategic participants in a social process by identifying the most feasible and effective strategies in light of the relevant social context in academia and the policy movement at large. This paper suggests there are some favorable trends and conditions in those contexts at present and a substantial portion of our strategies should seek to support, expand and reinforce those trends by helping the more established policy traditions to incorporate (and own) the tools, concepts and principles of the policy sciences, even if they do not identify with the policy sciences community or intellectual legacy *per se*.

Note

1. My use of the term “policy sciences” in this paper refers to the distinctive tradition founded by Lasswell.

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