



Book Review

Social Discourse and Environmental Policy: An Application of Q Methodology

Helen Addams and John Proops, Eds.

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Arriving in the midst of a flurry of publications about Q and the environment, Addams and Proops' compilation successfully demonstrates the value of Q Methodology in assessing complex, multi-layered social policies. (For recent publications on Q and environmental policy, see Webler et al. 2001, Robbins 2000, Steelman 2000, Woolley and McGinnis 2000, Woolley et al. 2000, Peritore 1999, van Eeten 1999, and Kalof 1997-98.) The anthology's selections provide a strong endorsement of Q methodology, which the authors find a natural fit for evaluation of environmental policy; indeed, the editors note that it is an "almost perfect technique for the initial states of environmental policy analysis" (p. ix).

Overview and Problem Definition

Helen Addams' overview chapter on Q methodology is well structured and clearly written. It provides an excellent explanation of Q research techniques, in a format that is easily understandable for novice students. However, its comprehensive and concise explanations will also benefit more established researchers, who may come to rely on it for quick descriptions of the methodology. In any case, Addams' superb contribution is significant, and is useful to Q researchers in all fields.

Revealing Submerged Perspectives

Broadly speaking, the authors in this compilation define policy problems in one of two ways. The first approach focuses on revealing submerged or unacknowledged perspectives in environmental conflicts. The articles by Michel van Eeten and Rose Capdevila assert that the polarization in the field (environmental conflicts) resulted in submerging useful perspectives for the solutions. Hidden ideas only became visible with Q sorting. In his analysis of potential expansion of the Amsterdam airport, van Eeten contends that

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historical conceptions of the issue only mirrored conflict polarization by focusing on one alternative infrastructure, namely whether or not to accommodate demand (p. 45). Rather, van Eeten reasoned that the policy challenge was to transcend polarizations and "identify and expand the potential for policy deliberation" by enriching and broadening the perspective of the policy analyst (p. 62). His Q-analysis of 38 stakeholders revealed 5 factors, which he termed "policy arguments." The revelation of the existence of multiple divergent factors was a major departure from previous understandings of the issue, which usually focused on only 2 policy perspectives. Likewise, Rose Capdevila and Rex Stainton Rogers were interested in transcending typical polarized portrayals of environmental activism ("Conservationists vs. Conservatives" p. 172). Their chapter explores the narrative connotations inherent in a single magazine article about an environmental activist.

Toddi Steelman's contribution follows the broad theme of revealing submerged or under-acknowledged perspectives also. In this analysis of bureaucratic perceptions of public involvement in policy processes, Steelman asserts that the subjective perceptions of scientists and agency staff provide a crucial segment of discourse in the policy arena, but these views are frequently overlooked in assessments of environmental conflicts. Steelman asked 15 US Forest Service staff to participate in 2 Q-sorts as part of a focus group session. The first sort was designed to determine what types of public involvement were deemed most or least useful (3 factors found); the second sort asked how the public should be involved in the policy process (2 factors found).

Analysis of Stakeholder Belief Systems

The second thematic approach by Addams and Proops in defining policy problems involves the analysis and understanding of different belief systems of stakeholders. The contributions of Dayton; Focht and Lawler; the Peritores; and, to a lesser extent, Kalof; and Fairweather and Swaffield all pursue stakeholder beliefs as a strategy for policy analysis.

In a contributed chapter based on his dissertation research, Bruce Dayton asserts that because stakeholders "start their discourse from contrasting and often incompatible models... [about] beliefs, evidence, and goals," policy debates rarely originate from an "uncontested empirical consensus" about an issue (p. 71). In this condition of uncertainty, rational problem solving is resisted, and an understanding of the psyche of stakeholders is essential to progress. In his analysis of global climate change, Dayton provides an exceptionally well-organized and clear overview of the 3 factor viewpoints his work revealed.

Q analysis fits well with the concept of *policy dialogue* offered by Will Focht and James Lawler. They define this as a "psychological process" that

depends on the perceptions and motivations of participants. The authors first detail 3 factors that were distilled from a meta-analysis of 14 studies of stakeholder perceptions. Focht and Lawler then report the results of their own research in Oklahoma, which involved 7 scenarios of “locational conflict” (NIMBY). No information was provided on the trends and conditions of these conflicts; instead, the focus of the analysis remained on relationships of the factors across studies. The results of the Oklahoma studies were then compared to the 3 factors generated from the literature review, and 3 commonly shared factors were distilled using second order factor analysis. Finding shared viewpoints is an interesting approach to the challenge of factor comparisons across studies, particularly because Q studies are typically considered to be non-generalizable.

In another study assessing fundamental perspectives of stakeholders, the highly experienced Q research team of N. Patrick Peritore and Ana Karina Galve-Peritore provide a bold analysis of the perceptions of 241 elites, or people in privileged positions in business, government, and environmental groups, in 7 developing countries. They found transformations in third-world elite environmental values, and distilled 7 factors that cut across national boundaries.

Noted authors John Fairweather and Simon Swaffield provide an alternative approach to the study of environmental perspectives through the use of photographs in Q analyses. The authors offer a realistic assessment of the strengths and weaknesses of this technique through the review of 3 of their own studies that employed Q to study perceptions of natural and built environments. They concluded that Q sorting works well with photographs and is appropriate for “research that emphasizes both experiential and socio-cultural aspects of perceptions of the environment” (p. 149). They concluded that Q sorting works well with photographs, because the photos easily capture the richness of experience and perceptions. However, the authors found the interpretation of photographic Q sorts to be challenging, largely because photographs do not have implied or limited ranges of meaning that text statements typically convey (p. 145).

A chapter contributed by established scholar Linda Kalof also follows the theme of assessing stakeholder perceptions to transcend policy problems. Kalof analyzes human perceptions of non-human animals; however, her use of Q is somewhat unorthodox, and her methodology does not conform to conventional Q techniques.

Policy Analysis in Complex Issues

Overall, the contributing authors’ research revealed 3 ways Q can be used as a policy analysis tool in complex social debates.

Reframing the Issue

First, van Eeten and Dayton both assert that reframing an issue may reveal previously unrecognized possibilities for conflict resolution. In his analysis of policy implications, van Eeten utilizes an interesting technique of coupling invented polar opposites of the newly discovered perspectives with the original factors to generate new alternatives. Dayton’s analysis defined the global warming problem as one that centers on frame discordance. In addition to reframing the global warming dialogue, Dayton asserts that Q could be helpful in the construction of pre-negotiation dialogues or in promoting depersonalization of the conflict (p. 97).

Analyzing Stakeholder Perceptions

Secondly, Q can be used as a policy tool to clarify theoretical relationships or understandings of an issue. In an academic analysis of their research on third-world elites, the Peritores utilized an interesting and conceptually powerful technique of plotting the scores for their factors along axes of post-modern and post-Fordist attitudinal space. (“Post-Fordism” is defined as the economic basis of post-modern culture, which is characterized by a globalized, high-tech, hyper-capitalist economy (p. 196). The authors concluded that there is an ideological shift in third-world elites to a new politics that they term “Post-Fordist Postmodernism” (p. 196, 215). In the conclusion of their study, Focht and Lawler assert that accurate understandings of perspectives may assist in finding “super-optimum,” i.e. win-win, solutions to environmental conflicts (p. 115).

Evaluating Policy Options

The third major policy tool presented in the compilation involves the use of Q in evaluating policy options. Steelman explicitly asked National Forest staff members for their opinions on solutions to the policy challenge of public involvement in planning processes. Steelman’s analysis provided an interesting management implication by proposing the use of Q to predict which agency staff might be best suited to different interaction scenarios. Her findings also pointed to the need for possible reorientation of bureaucratic values, norms, and incentives to promote more realistic public involvement.

Summary

Overall, the authors clearly make the case that Q methodology is a powerful tool for revealing the complexity and structure of stakeholders’ perceptions. Many of the policy recommendations in the anthology involve extensions or reformulations of issues based on these perceptual revelations. Understanding stakeholder perspectives and belief systems is a natural place to begin policy analysis, but Q has the potential to go much further. For example, Q methodology can be used explicitly in goal classification or the invention of

alternatives in decision seminars (see Brown 1974), for construction of images of the future, or in focus groups as trust or skill building sessions. While these applications of Q typically begin with an assessment of stakeholder viewpoints, they also employ explicit evaluations of perceptions of solutions to policy problems. Steelman's technique most closely approximated this type of solution analysis. Perhaps the next wave of environmental policy analysis will incorporate and enhance these techniques. Addams and Proops' anthology is a significant and noteworthy contribution to Q scholarship in the policy evaluation field.

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