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NEPA IN THE DOMAIN OF FEDERAL INDIAN POLICY: SOCIAL KNOWLEDGE AND THE NEGOTIATION OF MEANING

James P. Boggs*

I. Introduction

In the past two decades, Congress and a number of state legislatures have enacted statutes requiring government agencies to evaluate the environmental impacts of any proposed agency actions. To comply with these statutes, such as the National Environmental Policy Act (NEPA) of 1969,¹ agencies typically must prepare detailed studies known as "environmental impact statements," or "EISs."² The purpose of an EIS is to apprise the public of a proposed agency action and, at least in principle, provide the agency with the information it needs to make an informed decision about that action.³ Through their EIS requirements, laws such as NEPA mandate both the creation of knowledge—including knowledge about society, or "social knowledge"—and the use of that knowledge in public decisionmaking.⁴ As a result, these laws raise subtle and difficult problems of policy implementation.

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¹ 42 U.S.C. §§ 4321–4370 (1988). Section 4331 identifies the concerns that federal agencies are to address in evaluating proposed "major federal actions," as well as the spirit in which they are to implement the procedures described in section 4332. *Id.* §§ 4331, 4332(C). The Council on Environmental Quality (CEQ) promulgated regulations under NEPA in 1978. 40 C.F.R. pts. 1500–1508 (1990).

² See, e.g., DANIEL R. MANDELKER, NEPA LAW AND LITIGATION § 1:01, at 1 (1984).

³ See infra notes 21-23 and accompanying text.

⁴ See, e.g., 42 U.S.C. § 4331 (1988); id. § 4332(A) (federal agencies shall "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social

Sociocultural and environmental concerns intertwine in the large, capital-intensive projects that trigger the EIS process. The communities that such projects may affect often are worried about a particular project's anticipated sociocultural impacts, and it is these impacts that frequently become the focus for intense public debate. By law, an EIS must catalogue and evaluate the sociocultural as well as the environmental consequences of a proposed project.⁵ Legislators and agency officials, however, frequently misunderstand and even overlook the social impact review requirements of environmental review law, with troubling and often expensive consequences. In addition, scholars by and large have disregarded the intriguing problems of legally mandated social knowledge use.⁶ As a result of this two-tiered neglect, the social and cultural dimensions of the EIS process are its least understood and least developed aspects.

Focusing on NEPA as the model environmental review statute, this Article explores the role of social science in the EIS process and in agency decisionmaking. It aims to draw attention to the importance of measuring social impacts during the EIS process, and to suggest a more complete conceptual framework for inquiring into the issues that social knowledge use raises. In particular, this Article examines the preparation of social impact assessment (SIA) studies that involve Native American tribes. SIA studies are a mandated part of all EISs. Their inclusion in EISs means that decisions about natural resource use, which agencies previously would have based solely on engineering, economic, and environmental grounds, also must address social concerns.

When an environmental review statute such as NEPA requires a government agency to assess a proposed project's social impacts, it introduces not simply a new topic for consideration, but a whole new body of knowledge, into the agency's decisionmaking process. This

sciences . . . in planning and decisionmaking which may have an impact on man's environment") (emphasis added); id. § 4332(B) (federal agencies shall "identify and develop methods and procedures . . . which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking"); id. § 4332(C) (federal agencies shall evaluate all "major federal actions significantly affecting the quality of the human environment") (emphasis added).

⁵ See id. § 4332(A)-(C).

⁶ The field of "social knowledge utilization" has not yet formulated a comprehensive approach to environmental review laws and their requirements for the wide-scale use of social knowledge. See generally William Dunn & B. Holzner, Knowledge in Society: Anatomy of an Emergent Field, in 1 Knowledge in Soc'y 3 (1988) (overview of literature in field of social knowledge utilization).

⁷ 40 C.F.R. §§ 1502.6, 1508.8(b) (1990); see also 42 U.S.C. § 4332(A)–(C) (1988).

Article addresses the fundamental question of what happens when a statute compels the introduction of new types of knowledge into an established decisionmaking arena. In pursuing this inquiry, the Article views agency decisions as occurring within "policy domains."8 A policy domain comprises the subject area in which a government agency makes its policy decisions. For example, the domain of forest management deals with forests, and the domain of federal Indian policy addresses issues affecting Native Americans. The types of knowledge that an agency uses to make its policy decisions demarcate the boundaries of its policy domain. Agencies typically do not use all the available knowledge regarding a subject area to make decisions in that area. They not only consider some issues irrelevant. but also simply do not use certain knowledge about issues that they do consider relevant. In other words, agencies maintain boundaries of their particular policy domains by selectively admitting knowledge into the public arena as the basis for their decisions.

Because the use of "social knowledge" in decisionmaking shapes governmental priorities, participants in public disputes about the types of knowledge that will inform policy decisions in effect are negotiating the very contours of social reality.⁹ In this light, the EIS may be understood as a means by which communities, environmental groups, and Native American tribes may introduce a wider variety of "forms of social knowledge" into public policy deliberations. In other words, it is a tool for challenging long-entrenched policy domain boundaries.

The problems that commentators on environmental review law have noted in the implementation of NEPA's social impact review requirements¹¹ are more understandable when one acknowledges the existence of policy domains. Indeed, the neglect of the social dimension in both the practice and the theory of environmental review exemplifies the mechanism of policy domain boundary maintenance at work. Certainly, many of the areas of agency decisionmaking that laws like NEPA affect, such as forest management and water re-

⁸ See infra notes 80-113 and accompanying text.

⁹ See infra notes 77, 109 and accompanying text.

This Article uses the term "forms of social knowledge" to convey the understanding, popularized by Thomas Kuhn and now accepted by many philosophers of science, that knowledge occurs not as discrete facts, but as organizing principles, or "paradigms," by which facts are understood. See Thomas S. Kuhn, The Structure of Scientific Revolutions 7, 110–74 (1962). A central tenet of this Article is that knowledge constitutes not mere understanding, but a constantly evolving set of rules for action.

¹¹ See infra notes 31–53 and accompanying text.

source policy, traditionally have not been understood to require social research or encompass social concerns.

Thus, comprehending the dynamics of maintaining policy domain boundaries is central to the successful implementation of environmental review statutes. To illustrate this point, this Article examines the federal "Indian" policy domain¹² and evaluates the success of the EIS process in introducing new "knowledge forms" into government decisionmaking regarding Native Americans.¹³ Interestingly, much social science knowledge proves to be as foreign to Indian policy as to national forest policy. The United States Bureau of Indian Affairs (BIA), for example, continues to resist NEPA and make little use of social science.¹⁴

This Article first considers the role that the social impact review requirements of NEPA play in agency decisionmaking and judicial review. It discusses the failure of scholars in various academic disciplines to consider the problem of implementing the social impact review requirements of environmental review laws. This Article then critiques existing commentaries on the practice of SIA and proposes a new framework for understanding the value of SIA. This framework builds on interpretive approaches from the fields of anthropology, social knowledge utilization, and law and society studies.

Finally, this Article examines two recent cases to show how NE-PA's mandate for social impact review can change the premises upon which agencies base their decisions in the domain of federal Indian policy. It concludes that the particular problems of implementing social impact review requirements implicate broad questions regarding power and the use of knowledge in a democracy. For this reason, the preparation of more adequate SIA studies, and thus the introduction of new and different types of social knowledge into government decisionmaking, is desirable.

Inquiry into the role of applied social science in statutorily mandated environmental review is timely. On one hand, there are events, such as Chernobyl and the Exxon Valdez oil spill, and issues, such as nuclear waste disposal and global warming, that become ever more large-scale and complex and have innumerable technical and

¹² See infra notes 114-48 and accompanying text.

¹³ See infra notes 149-206 and accompanying text.

¹⁴ See Dean B. Suagee, American Indian Religious Freedom and Cultural Resources Management: Protecting Mother Earth's Caretakers, 10 Am. Indian L. Rev. 1, 50 n.245 (1982). According to Suagee, "[t]he BIA [has] resisted the application of NEPA.... [It] has never seen the need for its environmental review staff to include personnel with expertise in cultural anthropology." Id.; see also infra notes 176–78 and accompanying text.

human ramifications. Even seemingly routine management decisions, such as those involved in maintaining a power plant or piloting an oil tanker, can have world-wide consequences. On the other hand, just when Western bureaucratic and technical hegemony seems most pervasive, the underlying social and cultural diversity of the world's peoples has never been more apparent. In light of these emerging realities, a public decisionmaking process that integrates current scientific and technical knowledge with the myriad perspectives of the world's different publics, and then introduces both directly into relevant policy debates, merits careful scrutiny.

II. SOCIAL KNOWLEDGE IN THE ENVIRONMENTAL REVIEW LAW PROCESS: IMPLEMENTING NEPA'S MANDATE TO USE SOCIAL SCIENCE

A. NEPA: The Model Environmental Review Statute

Inaugurated in the United States through the enactment of NEPA,¹⁵ the environmental review law¹⁶ process has been adopted by a majority of state governments, incorporated into regulations by other statutes, and legislated into existence by nations throughout the world.¹⁷ The key provisions of this "fundamentally new litigative order"¹⁸ typically include a scoping procedure by which a government agency that is contemplating an action with potentially significant environmental and social impacts identifies the proposed

^{15 42} U.S.C. §§ 4321-4370 (1988).

¹⁶ Most studies of the NEPA process have considered only the statute itself. NEPA, however, has spawned much legislation of the genre first identified in the CEQ's NEPA regulations as "environmental review law." 40 C.F.R. § 1502.25(a) (1990); see Suagee, supra note 14, at 49 n.242, 51 n.250. This Article uses the terms "NEPA" and "environmental review law" more or less interchangeably. Although NEPA requires review of a proposed project's environmental and social impacts only after the project's scope has been defined, a growing number of environmental review laws introduces such review much earlier. See Suagee, supra note 14, at 49–50.

¹⁷ See Joan R. Goldfarb, Comment, Extraterritorial Compliance with NEPA Amid the Current Wave of Environmental Alarm, 18 B.C. ENVTL. AFF. L. REV. 543, 583–87 (1991); see generally Nicholas Robinson, SEQRA's Siblings: Precedents from Little NEPA's in the Sister States, 46 Alb. L. REV. 1155 (1982); Philip Weinberg, A Powerful Mandate: NEPA and State Environmental Review Acts in the Courts, 5 PACE ENVIL. L. REV. 1 (1987).

¹⁸ Harry N. Scheiber, *The Impact of Technology on American Legal Development*, 1790–1985, in Technology, the Economy, and Society: The American Experience 83, 107 (Joel Colton and Stuart Burchey eds., 1987).

action's anticipated effects; ¹⁹ agency preparation of an EIS on these possible effects; public distribution of the EIS; and incorporation of the EIS and public comments on it into the record that is the basis for the agency's final decision. ²⁰

NEPA mandates that federal agencies take an interdisciplinary approach, using both "the natural and social sciences," in preparing EISs.²¹ SIA has evolved within social science as a new discipline to meet the challenges of the EIS process.²² Every EIS must contain chapters on both the existing social, cultural, and economic conditions in the communities potentially affected by the project under review, and the changes that the project may cause.

NEPA's introduction of social science into public decisionmaking has substantial practical implications. The statute's social impact review mandate tests government's ability to broaden the range of information and perspectives allowed into public policy debates and to enhance the roles of rationality and democratic principles in public decisionmaking.²³ Current environmental problems are as much social issues as they are issues of biology or physics. Because the solutions to these problems lie as much with social science as with natural science, reviewing the social impacts of policy decisions only can advance explorations for such solutions. Nonetheless, agency officials and scholars alike have paid little attention to the social impact review requirements of environmental review law.

The CEQ introduced the concept of scoping in its 1978 regulations in order to ensure early and open public involvement. The regulations specifically require federal agencies to "[i]nvite the participation of . . . any affected Indian tribe" 40 C.F.R. § 1501.7(a)(1) (1990); see generally CEQ Scoping Guidance, 46 Fed. Reg. 25,461 (1981).

²⁰ 42 U.S.C. §§ 4332(c)(i)—(v), 4332(b) (1988). One commentator found "[t]he provisions of NEPA [to be] analogous to a charitable trust established to preserve the integrity of the American environment for the 'succeeding generations' of American citizens." Maria Holland, Comment, Judicial Review of Compliance with the National Environmental Policy Act: An Opportunity for the Rule of Reason, 12 B.C. ENVTL. AFF. L. REV. 743, 746 (1985). For other perspectives on NEPA and environmental impact assessment, see Lynton K. Caldwell, A Constitutional Law for the Environment, 31 ENV'T 6, 6–11, 25–28 (1989); see generally John Hagerty & D. Joseph Heer, Environmental Assessments and Statements (1977); Sally K. Fairfax, A Disaster in the Environmental Movement, 199 Sci. 743 (1978); Kenneth Murchison, Does NEPA Matter?—An Analysis of the Historical Development and Contemporary Significance of the National Environmental Policy Act, 18 U. Rich. L. Rev. 557 (1984); Joseph L. Sax, The (Unhappy) Truth about NEPA, 26 OKLA. L. Rev. 239 (1973).

²¹ 42 U.S.C. § 4332(A) (1988).

²² James P. Boggs, *The Use of Anthropological Knowledge Under NEPA*, 49 Hum. Organization 217, 218 (1990); see generally Gregory A. Daneke et al., Public Involvement and Social Impact Assessment (1983); William R. Freudenburg, *Social Impact Assessment*, 12 Ann. Rev. Soc. 451 (1986).

²³ James P. Boggs, *EIA Within Democratic Politics*, 9 IMPACT ASSESSMENT BULL. (forthcoming 1991).

B. Problems of Implementation

Scholars in the field of policy implementation²⁴ recognize NEPA's significance but largely overlook the statute's social impact review requirements, focusing instead on its requirements regarding the natural environment.²⁵ Similarly, scholars in the area of social knowledge utilization have neither considered the question of social knowledge use under NEPA nor recognized that this question constitutes a relevant and intriguing area of inquiry.²⁶ Moreover, although NEPA has generated a large and often thoughtful legal scholarship, that portion of the scholarship focusing on NEPA's social impact review requirements is sparse and narrowly focused.²⁷ The literature discussing cases that address the role of social science under NEPA typically cites those cases to illustrate general legal issues, without treating the social science issues as salient in their own right.²⁸ Meanwhile, legal commentators who are interested in social science tend to hold a constricted view of it—one that equates social science

²⁴ One commentator asserts that the "great increase in concern for policy implementation" constitutes the most significant development in policy analysis during the 1970s. DEAN E. MANN, ENVIRONMENTAL POLICY IMPLEMENTATION 1 (1982).

²⁵ See generally Richard N. L. Andrews, Environmental Policy and Administrative Change (1976); Mann, supra note 24; Daniel A. Mazmanian & Jeanne Nienaber, Can Organizations Change? (1979); Serge Taylor, Making Bureaucracies Think: The Environmental Impact Statement Strategy of Administrative Reform (1984).

²⁶ But see Judith A. Bradbury, The Use of Social Science Knowledge in Implementing the Nuclear Waste Policy Act (1989) (unpublished Ph.D. dissertation, University of Pittsburgh).

²⁷ See generally Bill Shaw & Jim H. Robichaux, Council on Environmental Quality: Defining Human Environment, 16 Cal. W. L. Rev. 201 (1980); Janet Boche, Note, Como-Falcon v. Department of Labor: The Role of Public Hearings and Socio-Economic Impacts in Determining Whether NEPA Requires an EIS, 6 Colum. J. Envil. L. 164 (1980); Joseph W. Cornelison, Comment, Socioeconomic Impacts and the National Environmental Policy Act of 1969, 64 Geo. L.J. 1121 (1976). For an overview of the debate on using social science in risk assessment, see Deborah B. Bauser, Through the Looking Glass and Back Again: The Pane Case, A Rebuttal, 9 Harv. Envil. L. Rev. 211 (1985); William Freudenburg, Perceived Risk, Real Risk, 242 Sci. 44 (1988).

A significant body of literature relating to Native American sacred lands provides a limited exception to the absence of social science perspectives in the NEPA scholarship. This literature, however, focuses on the American Indian Religious Freedom Act (AIRFA) of 1978, codified in part at 42 U.S.C. § 1996 (1988), rather than on the broader concerns that NEPA articulates. It warrants brief mention here because it falls within the larger category of articles regarding environmental review law. See, e.g., Suagee, supra note 14, at 49 n.242, 51 n.250.

²⁸ For instance, Strycker's Bay Neighborhood Council v. Karlen, 444 U.S. 223 (1980)—an important case involving a United States Department of Housing and Urban Development plan for urban renewal in Manhattan—usually is cited to illustrate the United States Supreme Court's recent proceduralist interpretation of NEPA. See, e.g., Richard I. Goldsmith & William C. Banks, Environmental Values: Institutional Responsibility and the Supreme Court, 7 Harv. Envil. L. Rev. 1, 6–13 (1983).

with statistics—and to overlook NEPA's explicit requirements for the use of non-quantitative methods.²⁹ Moreover, scholars in the field of law and society have elected not to consider the questions presented by the incorporation of social science into law as a component of environmental impact review.³⁰

While the NEPA requirement that federal agencies evaluate the social impacts of a proposed agency action has not received the attention one might expect within the broader social science and legal communities, some scholars and practitioners involved in SIA have taken the time to assess the current state of the discipline. Their appraisals of SIA studies that agencies have produced in response to NEPA's requirements are far from sanguine. An early inquiry into NEPA's social impact review requirements found that agencies' consideration of the social consequences of proposed projects in EISs was limited.³¹ Social impacts chapters in EISs were often dismal, consisting largely of economic justifications for the proposed projects and omitting any discussion of the projects' effects "on the human community as a system." For example, one EIS discussed a proposed agency action's impacts on Native American sacred lands under the heading "wilderness," not "culture" or "religion."33 The authors of this early inquiry concluded that "social impact assessment in EIS's is almost always devoid of any recognizable social theory "34

²⁹ See 42 U.S.C. § 4332(B) (1988); see generally Noreen L. Channels, Social Science Methods in the Legal Process (1985); John Monahan & Laurens Walker, Social Science in Law: Cases and Materials (1985); Michael J. Saks & Charles H. Baron, The Use/Nonuse/Misuse of Applied Social Research in The Courts (1980).

One commentator criticizes courts that allow agencies to identify all socioeconomic impacts that cannot be measured as "insignificant," but this commentator goes on to accept the assumption that such non-quantifiable impacts therefore must be "speculative." Cornelison, supra note 27, at 1127–29. In fact, quantitative social science methodologies often rest on highly speculative maneuvers, whereas qualitative methodologies may be solidly empirical, involving little if any speculation.

³⁰ These statements are based on the author's current understanding—he cannot claim expertise in each of the diverse fields discussed in this paragraph, and is willing to be proven wrong. The law and society literature may be found in LAW & SOCIETY REVIEW, LAW & SOCIAL INQUIRY, and other journals. Work in social knowledge utilization and in law and society particularly have contributed to the perspectives developed below. Both of these areas are at the forefront in the exploration of the non-quantitative dimensions of social knowledge utilization.

³¹ H. Paul Friesema & Paul J. Culhane, Social Impacts, Politics, and the Environmental Impact Statement Process, 16 NAT. RESOURCES J. 339, 342 (1976).

³² Id. at 343.

³³ Id.

³⁴ Id. at 345.

More recent assessments have been similarly bleak. A formal survey of EISs found that over four-fifths of the SIAs it sampled lacked any discernable social science method, technique, or theory. The addition, some scholars have identified what they term a "legal anomaly:" that EISs fail to take advantage of social science expertise even though case law makes it clear that it is in everyone's best interests to describe social impacts fully in an EIS. There, concluding that the applied social research currently conducted for EISs is all too often nothing but "a shallow parody of contemporary social science," have wondered why courts allow patently incompetent studies to pass as adequate analyses of social life in impacted communities. More precisely, according to these commentators, courts have failed to hold agencies and their technical experts to standards that most scientists uphold.

The consistently poor quality of SIA studies has raised not only eyebrows, but also the curiosity of social scientists. Social science responded to the requirements of environmental review statutes such as NEPA by trying to develop a sophisticated discipline tailored specifically to fulfilling the statutes' need for social impact analysis. ⁴¹ The quality of most of the SIA studies that government agencies produce, however, still remains strikingly less than social science is capable of providing. What accounts for this phenomenon, which is so at odds with both common sense and legislative intent? One popular explanation is that efforts to introduce rationality into public decisionmaking always fail, because the public actions of agencies consist of political maneuvers rather than scientific management. ⁴²

³⁵ Arthur S. Wilke & Harvey R. Cain, Social Impact Assessment Under NEPA: The State of the Field. 8 W. Soc. Rev. 105, 107 (1977).

³⁶ William R. Freudenburg & Kenneth M. Keating, Applying Sociology to Policy: Social Science and the Environmental Impact Statement, 50 Rural Soc. 578, 578 (1985).

³⁷ Id. at 581.

³⁸ Joseph G. Jorgensen, Anthropologists as Participants in the Policy Process, 1 PoL'Y STUD. REV. 66, 70 (1981).

³⁹ Id. at 71.

⁴⁰ Bert Black, Evolving Legal Standards for the Admissibility of Scientific Evidence, 239 Sci. 1508, 1510 (1988).

⁴¹ See supra note 22 and accompanying text.

⁴² Friesema & Culhane, *supra* note 31, at 340. According to many, this is exactly as it should be, because the alternative raises the anti-democratic spectre of rampant technocracy. See, e.g., Carol Weiss, *Ideology, Interests*, and *Information: the Basis of Policy Positions*, in Ethics, the Social Sciences, and Policy Analysis 213, 221–23, 241 (Daniel Callahan & Bruce Jennings eds., 1983). This concern, however, assumes positivist science. Adelaide H. Villmoare, *Politics and Research: Epistemological Moments*, 15 Law & Soc. Inquiry 149, 152 (1990). As Villmoare notes, "post-modern" and interpretive models of science present more options. *Id*.

Indeed, expectations that NEPA will cause agencies to produce reasoned and coordinated policy is merely the latest variant of an ancient dream, the rational decisionmaking model of bureaucratic behavior, which has been long out of favor with political scientists.⁴³ Although NEPA requires government agencies to prepare competent analyses,⁴⁴ these agencies nonetheless retain great discretion in how they use such studies in their decisionmaking.⁴⁵ They can produce capable impact studies as required by statute and still respond to political realities. Thus, explanations for the failures of rational management in general may be less than enlightening when the issue is the narrower problem of producing competent social impact studies.

Among explanations that focus more directly on the pathetic state of the SIA studies that agencies produce⁴⁶ is the observation that a cogent analysis of social impacts would consider the political implications of a proposed action: how it might distribute positive and negative impacts differently to various classes or cultural groups.⁴⁷ Such an analysis, however, would expose the government's "fundamental myth that [its] programs serve an undifferentiated public interest."⁴⁸ Other commentators take an opposite tack. They hold that SIA studies are of poor quality not because agencies are able to get away with willfully violating NEPA,⁴⁹ but because special interest groups, using the EIS as an "instrument of legal and political warfare," make agencies the victims of "legal harassment."⁵⁰ Such interference with agencies prevents them from functioning properly.

Some critics view government agencies as "captured" by powerful business interests, or suggest that social scientists are the victims of subtle co-option by societal pressure or a professional socialization process that emphasizes "production science" more than "environ-

⁴³ Friesema & Culhane, supra note 31, at 340.

⁴⁴ 42 U.S.C. § 4332(A) (1988); 40 C.F.R § 1500.1(b) (1990) ("The [EIS] information must be of high quality. Accurate scientific analysis . . . [is] essential to implementing NEPA."); *id.* § 1502.24 ("Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.").

⁴⁵ See, e.g., TAYLOR, supra note 25, at 217, 223, 256; Freudenburg & Keating, supra note 36, at 581; Holland, supra note 20, at 759-67.

⁴⁶ Freudenburg & Keating, *supra* note 36, at 582-90; Friesema & Culhane, *supra* note 31, at 346-48: .

⁴⁷ Friesema & Culhane, supra note 31, at 348.

⁸ *Id*

⁴⁹ Freudenburg & Keating, supra note 36, at 591.

⁵⁰ Eugene Bardach & Lucian Pugliaresi, The Environmental-Impact Statement vs. the Real World, 49 Pub. INTEREST 22, 24 (1979).

mental/social impacts science."⁵¹ Still others offer penetrating analyses, not just of NEPA's social impacts review requirements, but of the whole NEPA process, finding that it results in mounds of useless paperwork, degrades science, and increases contention.⁵² One study even argues that environmental politics generally represent nothing more than the internal socio-psychological dynamics of sectarian fringe groups.⁵³ In total, commentators have put forward an impressive list of structural, political, and economic reasons bearing on the conundrum that agencies so regularly fail to produce good SIA studies, even though the law requires them to do so, and they may get sued if they do not.

Many of these critiques are sound, noting the late and sometimes "after-the-fact" position of the NEPA EIS process in government agencies' overall decisionmaking processes, and the difficulties posed by NEPA's heavy reliance on judicial review for effect. Some arguments, though, tend toward circularity. This may be seen, for instance, in the popular argument that NEPA must fail, because agencies inevitably are more committed to political maneuvering than wise or rational management of the public trust. The underlying structure of such arguments seems to be that agencies do not comply with NEPA because NEPA's mandates are unrealistic, and the fact that these mandates are unrealistic is evidenced by the agencies' noncompliance.

Further, such arguments seem not to grasp the importance of mandating by statute the creation and use of social knowledge for agency decisionmaking. Legal mandates such as NEPA's social impact review requirements exist for the express purpose of making otherwise unlikely things happen. Arguments that, for example, agencies prefer or are pressured into political maneuvering in their use of information might suffice to explain why SIA studies with a modicum of integrity and balance do not occur spontaneously. These arguments, however, may slip dangerously close to becoming facile post hoc rationalizations when offered as explanations for agency

⁵¹ Freudenburg & Keating, supra note 36, at 594; see Allan Schnaiberg, Obstacles to Environmental Research by Scientists and Technologists: A Social Structural Analysis, 24 Soc. Problems 500, 502 (1977); Errol Meidinger & Allan Schnaiberg, Social Impact Assessment as Evaluation Research, 4 Evaluation Rev. 507, 515–16, 531 (1980); see generally Allan Schnaiberg, The Environment: From Surplus To Scarcity (1980).

⁵² See, e.g., Andrews, supra note 25, at 161–63; Bardach & Pugliaresi, supra note 50, at 24; see generally Fairfax, supra note 20; Sax, supra note 20. But see Caldwell, supra note 20, at 25 (improvements in environmental science in recent years have allayed such early critiques of NEPA).

⁵³ Mary Douglas & Aaron Wildavsky, Risk and Culture (1982).

noncompliance with statutory law. Congress designed the procedural requirements of NEPA to force agencies to take "hard looks" at precisely those complex or uncomfortable issues that agencies tend to avoid. ⁵⁴ At least some of the institutional problems with producing worthwhile SIA studies—problems of which NEPA's critics have made much—are of the kind that the United States, as a pragmatic nation, excels at surmounting. Given a clear legal mandate, why do not agencies and courts "just do it?" There are issues here that current structural and political analyses do not reach. It is the aim of this Article by supplementing such analyses, to move closer to answering this question.

The social science community finds itself uncharacteristically in agreement on the fact that most EISs contain little or no social science. Even so, the EIS process is not entirely ineffective in changing agency sensibilities and behavior. On what is this efficacy based, if not on good faith assessment of social impacts? Analysts conclude that EISs are effective because they are part of a political, adversarial process that opens agency decisionmaking to public scrutiny and judicial review.⁵⁵

Within this political and legal context, however, the EIS process still turns on technical issues and scientific study. If the political nature of the EIS process dooms agency SIA studies to inadequacy, the effectiveness of this process then hinges on the public's comments, which must present "technically sound, detailed, and clear" critiques of the draft EIS.⁵⁶ Thus, we are left with the paradoxical conclusion that, while government agencies with the legal mandate and the resources to produce good social scientific analysis for EISs realistically cannot be expected to do so, the public, which lacks both mandate and resources, nevertheless must introduce sound social knowledge into the EIS process in the form of comments on the draft EIS. In this view, public comments are not responses to a sound technical analysis, as envisioned by NEPA's architects. Rather, they substitute for analysis in order to make the process work.

Social science may play an adversarial or advocacy role in the NEPA process, supporting community values and concerns and countering the tendencies of agencies to produce EIS studies that

⁵⁴ Boggs, supra note 22, at 221; see also Holland, supra note 20, at 761 n.170 (review of "hard look" doctrine in NEPA case law).

⁵⁵ Friesema & Culhane, *supra* note 31, at 340, 354-56.

⁵⁶ Id. at 351.

either justify proposed projects or are simply inadequate. Requiring social science to play this role, however, entails certain risks when one side, the agency, has all the power and resources.⁵⁷ Even if shifting the burden for adequate SIAs onto often poor communities appears logical when one views NEPA implementation as a political process, this transfer of responsibility is not what NEPA intends and poses ethical and practical problems.⁵⁸

General limitations on the judicial review of technical controversies further complicate questions regarding the adequacy of SIA studies in EISs. Growing numbers of disputants are bringing conflicts that involve technical issues to court for resolution. Reasoning that government agencies have technical expertise that courts lack, as well as better knowledge of the social and economic contexts in which they administer particular statutes, courts often accord great deference to an agency interpretation of a statute for which the agency is responsible. ⁵⁹ Courts also resolve cases on points of procedure, ignoring the substantive scientific questions raised. ⁶⁰ Courts face a difficult dilemma in these cases, in that they must "evaluate expertise while simultaneously depending on it"

NEPA cases represent a significant subset of cases that involve technical knowledge. NEPA's requirement that agencies perform technical review is clear. The judiciary, however, is divided on whether to defer to the agencies' decisions in these cases or subject agency actions to more stringent substantive review on the strength of the substantive and procedural provisions of NEPA. 62 When issues involving the creation and application of social knowledge are at issue, judicial deference to an agency on the grounds of agency expertise may be especially misguided. Agencies often do not have social science expertise, even when they manage cultural resources or their decisions affect the social life of local communities, and environmental review statutes order them to review their actions with regard to these responsibilities.

⁵⁷ Freudenburg & Keating, supra note 36, at 599-600.

⁵⁸ See Sheila Jasanoff & Dorothy Nelkin, Science, Technology, and the Limits of Judicial Competence, 214 Sci. 1211, 1214–15 (1981). "Expert forums may limit the role of dissent by giving a dominant place to establishment views on controversial topics." Id. at 1215.

⁵⁹ William W. Ross, Components of an Adequate Record, in Law and Science in Collaboration 23, 26 (J.D. Nyhart and Milton M. Carrow eds., 1983).

⁶⁰ Edward L. Korwek, Science and the Courts, 210 Sci. 376, 376 (1980).

⁶¹ Black, supra note 40, at 1508; see also Andrews, supra note 25, at 157-63; Hanna J. Cortner, A Case Analysis of Policy Implementation: The National Environmental Policy Act of 1969, 16 NAT. RESOURCES J. 323, 329-37 (1976).

⁶² Holland, *supra* note 20, at 766, 773.

In conclusion, existing analyses of the poverty of social science in EISs, while often cogent, remain incomplete. They rely basically on the insight that agencies, existing within a political environment, sometimes blatantly play politics with SIAs. Solutions, the reasoning goes, therefore also must lie in the political realm: either be "realistic" and recognize that the scientific quality of SIA studies is largely irrelevant in the political arena, or play politics as well and conduct advocacy social science for other adversaries in the process. All in all, these analyses neither grasp fully the reality of what happens when communities, agencies, social scientists, and lawyers enter the arena in a NEPA dispute, nor provide reasonable solutions to the very real problems they identify.

C. Knowledge and Politics in the NEPA Process

It is now well established that that NEPA broadens environmentalists' access to agency decisionmaking about federal projects that may have significant environmental effects. Similarly, NEPA provides a forum for Indian tribes and other economically and politically marginal communities that are concerned about a proposed project's social impacts. In effect, NEPA "applies a new force" to the basic principles of administrative law. Expanding existing requirements for formal statements of findings, reasons, and disclosures, the statute subjects new categories of agency actions to review and tests ideas about fair informal procedure. In other words, NEPA causes public decisionmaking to incorporate sources of knowledge that may exist somewhere in the general culture, but typically would not be part of the decisionmaking process.

Focusing on the use of knowledge in the EIS process, rather than on the measurement of observable changes in agency behavior as a result of that process, fundamentally shifts our view of what implementing NEPA means. As noted above, many commentators regard the statute's requirement of quality SIA studies as unrealistic and agree that the substance of such studies becomes irrelevant in the politically driven NEPA process. 66 Looking at NEPA as a political process whose success is quantifiable in terms of behavioral outcomes forces the quality and substance of SIA studies out of focus. They

⁶³ Cortner, supra note 61, at 329-32.

⁶⁴ *Id.* at 331 (quoting Kenneth C. Davis, Administrative Law: Cases—Text—Problems 587 (1973)).

⁶⁵ Id

⁶⁶ See supra notes 42-43 and accompanying text.

become blurry background issues, dismissible as impractical expectations. Understanding the implementation of NEPA as a problem of properly using knowledge, however, is like picking up a different lens. This new lens shifts the focus back to the issues of quality and substance and reduces the power of the purely political aspects of the NEPA process. It also moves the emphasis from behavior to cognition, ⁶⁷ and adds ethical considerations to purely pragmatic ones. It thus provides a sounder conceptual foundation for the role of SIA studies in the NEPA process.

III. THEORETICAL FOUNDATIONS FOR UNDERSTANDING THE SOCIAL KNOWLEDGE DIMENSIONS OF NEPA IMPLEMENTATION

A. Overview

Existing approaches to understanding how social knowledge functions in the NEPA process stress the political aspects of that process and proceed largely from narrow behaviorist premises. Social scientists and legal scholars working in other fields, who might supplement or even supplant these approaches, have not found their way to this important problem in the application of social science. This Article now explores some of the possibilities that lie in the resultant gaps in these potentially relevant fields. It relies on studies in the fields of social knowledge utilization and law and society to develop an alternative approach to understanding the use of social knowledge under NEPA. It also draws insights from interpretive social science to supplement current, behavioristic approaches to understanding the use of social science under NEPA.

To reiterate briefly, environmental review statutes prescribe the systematic use of knowledge in agency decisionmaking. Because they require the use of social knowledge, in both qualitative and quanti-

⁶⁷ See, e.g., William N. Dunn, Conceptualizing Knowledge Use, in Knowledge Generation, Exchange, and Utilization 325, 328–30, 335–36 (George M. Beal et al. eds., 1986).

⁶⁸ See supra notes 24-30 and accompanying text.

⁶⁹ See generally Interpretive Social Science (Paul Rabinow & William M. Sullivan eds., 1979) (overview of interpretive approaches). Commentators have noted that much of the commentary on the last two decades of anthropological thought "has tended to focus on the shift in stress from behavior and social structure, undergirded by the goal of 'a natural science of society,' . . . to a renewed recognition . . . that social life must fundamentally be conceived as the negotiation of meanings." George E. Marcus & Michael M.J. Fischer, Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences 26 (1986). "Culture, after all, is a continuous creative, inventive process . . . not a dead representation." Malcom R. Crick, Anthropology of Knowledge, 11 Ann. Rev. Anthropology 287, 299 (1982).

tative forms, implementing these statutes means using "social knowledge." Our inquiry builds on a developing theoretical approach that regards human society and culture as consisting of not only static structure and impersonal evolutionary process, but also creative individual and collective activity. Social life is not simply form and process—it is also production. Within this theoretical framework, law becomes an institution by which people actively create and express their sociocultural reality, rather than a passive reflection of society's consensus about norms.

One consequence of adopting this framework is the recognition that the diverse "conditions of existence" in modern society generate a great multiplicity of "forms of knowledge"⁷⁴ within the differing institutions and classes that make up society. To ther words, there are likely to be profound differences in value and perspective among individuals who inhabit the same physical space and identify as members of the same community: who pass each other on the sidewalk, talk together in the same office, or live in the same house. This point is more than an abstraction or academic invention. To regard knowledge about society as a product of social activity is to direct attention to the ways in which the forms of social knowledge we create and legitimate profoundly mold the social orders within which we live and the ways in which we relate to tradition, create

The use of social knowledge is cognitive as well as instrumental; it results in changes in understanding as much as in behavior. Further, social knowledge use is as much a social and cultural phenomenon as an individual or psychological one. See infra notes 74–76 and accompanying text. This formulation brings recent developments from the fields of anthropology, ethics, and social knowledge utilization to bear on problems arising in the implementation of environmental review law and sets that inquiry on a broad foundation of contemporary scholarship in the social sciences and humanities.

⁷¹ See, e.g., MARCUS & FISCHER, supra note 69, at 26; Crick, supra note 69, at 299.

⁷² See, e.g., MARCUS & FISCHER, supra note 69, at 26; Crick, supra note 69, at 299.

⁷³ Clifford Geertz, Local Knowledge: Fact and Law in Comparative Perspective, in Local Knowledge 167, 216-19 (1983).

⁷⁴ See supra note 10 and accompanying text.

⁷⁵ PIERRE BOURDIEU, OUTLINE OF A THEORY OF PRACTICE 78 (1977); see G. Carter Bentley, Ethnicity and Practice, 29 COMP. STUD. SOC'Y & HIST. 24, 27–29 (1987).

The See Geertz, supra note 73, at 155. Geertz notes "how deeply into our lives the specificities of our vocations penetrate, how little those vocations are simply a trade we ply and how much a world we inhabit" Id. Adopting such a perspective can lead to extreme expressions of philosophical anti-realism. Interpretive social science does raise fundamental questions about the very nature of scientific knowledge, just as it raises basic questions about the role of science in society. Such issues lie beyond the scope of this Article, but bear on the arguments it develops. For a reasoned discussion of the realism issue, see Austin Sarat, Off to Meet the Wizard: Beyond Validity and Reliability in the Search for a Post-Empiricist Sociology of Law, 15 LAW & Soc. INQUIRY 155 (1990).

and respond to change, confront differences, and live our daily lives.⁷⁷

Because different members of a given social order interpret available knowledge in different and often conflicting ways, we cannot assume a common and "objective" social reality apart from the knowledge forms by which we understand that reality. What we try to describe objectively is itself grounded in interpretations. It is this lack of an ultimately objective social reality that makes understanding social knowledge and its uses an interpretive task.⁷⁸

As noted above, the administration of law is one mode of producing and using social knowledge, a social act that is intimately related to the creation and maintenance of society itself.⁷⁹ Much of the daily reproduction of this public expression of social order takes place within definable contexts, or "policy domains."

B. Defining Policy Domains

Two parameters define a policy domain: a policy focus, and knowledge about the object of that focus.⁸⁰ The domain of United States Indian policy focuses on Native American persons, cultures, and lands, and on relevant federal and state laws and treaties.⁸¹ All of these factors delineate the borders of an arena in which various legislative and administrative institutions operate. Some of these institutions, such as the BIA, are dedicated to this arena, while most enter it only occasionally.⁸² In sum, the arena and the institutions

⁷⁷ Geertz, *supra* note 73, at 153. According to Geertz, "to analyze symbol use as social action . . . [is to regard] the community as the shop in which thoughts are constructed and deconstructed, history the terrain they seize and surrender, and [is] to attend therefore to such muscular matters as the representation of authority, the marking of boundaries, the rhetoric of persuasion, the expression of commitment, and the registering of dissent." *Id*.

⁷⁸ See, e.g., William N. Dunn, Studying Knowledge Use: A Profile of Procedures and Issues, in Knowledge Generation, Exchange, and Utilization, supra note 67, at 369, 389–90.

⁷⁹ See supra note 10 and accompanying text.

⁸⁰ See MacRae, Building Policy-Related Technical Communities, 8 Knowledge 431, 441 (1987); see also Erve Chambers, Applied Anthropology, A Practical Guide 45–46 (1985); Marc L. Miller et al., Social Science in Natural Resource Management Systems 3–32 (1987); Hjern & Porter, Implementation Structures: A New Unit of Administrative Analysis, in Realizing Social Science Knowledge 265, 265 (Holzner et al. eds., 1983); see generally Oran R. Young, Resource Regimes: Natural Resources and Social Institutions (1982).

⁸¹ E.g., American Indian Religious Freedom Act, 42 U.S.C. § 1996 (1988).

⁸² For example, the United States Environmental Protection Agency administers federal environmental laws that contain provisions affecting Native American tribes. *See, e.g.*, Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9626 (1988).

operating in it constitute the structural framework of the Indian policy domain.

Decisionmakers in the arena of United States Indian policy act on the basis of their knowledge about the subject matter that is the substance of the arena: Native American peoples and cultures and their status within the wider society. Not all available knowledge, however, becomes the basis for agency action. There are many studies and much data in archives and universities that are ignored, and many possible approaches to research that are not adopted. The knowledge that eventually forms the foundation for an agency decision, and the principles by which agency decisionmakers select that knowledge from the larger pool of relevant knowledge, constitute the second parameter defining policy domains. The Indian policy domain here denotes both that arena of policy action dealing with Native American issues and the body of social knowledge upon which agency decisionmakers rely in taking action within that arena.

Understanding the concept of policy domains sets the stage for looking anew at the implementation of environmental review statutes. Such statutes, like NEPA, formally mandate the use of technical and scientific knowledge, including the results of social science research.⁸⁴ The Indian policy domain, however, is a formidable institution that has stood for years on its own foundation of social knowledge. NEPA's mandate for the use of social knowledge here will introduce different and sometimes clashing forms of social knowledge into an already established policy domain. The subsequent dynamics constitute a critical dimension of implementing environmental review law when Native American issues are involved.

Comprehending the overall framework of a policy domain requires one to take at least three lines of inquiry. One line of inquiry involves looking at actual decisions within a policy arena and piecing together the premises that seem to inform them. For instance, one might examine the rhetoric justifying the actions in question, consider their likely or documented results, inquire of those who formulate and implement them what their expectations and concerns are, and review relevant scholarly analyses.⁸⁵ A second line of inquiry involves

⁸³ Crick, *supra* note 69, at 293 ("[O]f necessity the knowledge we formulate about "the other' is bound to be refracted through the knowledge we have built to define ourselves."). The knowledge that informs United States policies regarding Native Americans consists not only of knowledge about Native Americans, but also of knowledge about non-Native Americans in relation to Native Americans. *See id.*

⁸⁴ E.g., 42 U.S.C. § 4332(A) (1988).

⁸⁵ For discussions of relevant methodological issues, see Bradbury, supra note 26, at 43-

examining the historical dimensions of a policy domain. The very concept of "domain" implies boundaries and identity and hence historical continuity. ⁸⁶ Thus, it should be possible to link present actions and the rationales underlying them to past policies. Current policy is better understood when placed in historical context. Through these first two steps, case study and historical review, the basic outlines of the dominant conceptual framework will begin to emerge.

The third area of inquiry consists of identifying the processes that protect the boundaries of the policy domain under examination: in other words, those means by which the integrity of the dominant conceptual framework that underlies decision and action within a policy arena is maintained. How, exactly, is potentially relevant knowledge "selected into" or "selected out of" a policy domain? Why does relevant information either become that knowledge on the basis of which action is taken or remain invisible, insignificant, or repugnant in the eyes of agency decisionmakers? These simple questions hold the keys to understanding how policy domains function and persist.

Commentators have identified a number of mechanisms by which agency decisionmakers select certain pieces of social knowledge to become the basis for policy action. First, natural resource management and environmental protection have been the subjects of highly polarized discussions for years, and participants in the agency decisionmaking process tend to fall into camps according to this polarity.⁸⁷ "Knowledge disavowal"⁸⁸ and "biased assimilation"⁸⁹ are two basic means by which some agency decisionmakers ignore "uncomfortable knowledge" or alter it to protect existing policies.⁹⁰ In other

^{81;} Walter Williams, The Study of Implementation: An Overview, in STUDYING IMPLEMENTATION 1-17 (Walter Williams ed., 1982); see generally William N. Dunn, Reforms as Arguments, 3 Knowledge 293 (1982); Dunn, supra note 67; Dunn, supra note 78.

⁹⁶ Interview with Nancy Leifer, Independent Consultant and Editor, in Missoula, Mont. (Jan. 19, 1990).

⁸⁷ See Carol H. Weiss, Perspectives on Knowledge Use in National Policy Making, in Knowledge Generation, Exchange, and Utilization, supra note 67, at 407, 411. According to Weiss, "[o]ften the constellation of interests around a policy issue predetermines the positions that decision makers take, or debate has gone on over a period of years and opinions have hardened For reasons of interest, ideology, or intellect, [policy makers take] a stand that research is not likely to shake." Id.

⁸⁸ See Gerald Zaltman, Knowledge Utilization as Planned Social Change, in Knowledge Generation, Exchange, and Utilization, supra note 67, at 433, 455.

⁸⁹ Charles G. Lord et al., Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence, 37 J. PERSONALITY AND Soc. PSYCHOL. 2098, 2098–99 (1979).

⁹⁰ Elizabeth Colson, *Using Anthropology in a World on the Move*, 44 Hum. Organization 191, 195 (1985).

words, officials sometimes overlook information when they do not want to confront its implications, or reinterpret it to conform to their own expectations. "Nondecision" plays a similar role. 91 Agency decisionmakers who "nondecide" define available knowledge as not presenting options or requiring decision. "Nondecision" has been evident in many NEPA disputes where agency officials have viewed EISs as procedural documents whose findings require no substantive action on their part. 92

In an excellent account of his experiences with the EIS process, one observer commented on a particular agency's apparent inability to deal with the public input that NEPA had required it to request. 93 The agency "simply did not know what to do with this qualitative data, however empirically sound," and rejected "most of it as too subjective to be used in its planning and decisionmaking." The efforts of local residents to participate therefore dwindled in the face of the agency's "unwavering ability to take their views out of account." Defining the knowledge with which it was presented as "too subjective," the agency disavowed the content of the information by slighting its form. 96

In some cases, there simply may be a lack of awareness, even at the highest levels, that an agency action involves decision at all. Rather than requiring a decision, agency officials may see the need simply for a "correction" to "keep things on course." Moreover, in structured adversarial systems, knowledge loses value as fact, because players in those systems regard it as a tool or weapon for their side. 98 Intelligence agencies, for example, value information not so

⁹¹ Weiss, *supra* note 87, at 421–22. As Weiss explains, "many issues never come up for decision because dominant values or organizational procedures keep them off the agenda . . . 'Some issues are organized into politics while others are organized out.' . . . [C]ommunity values, myths, precedents, rituals, and institutional procedures determine what is—and what is not—to be decided." *Id*.

⁹² See infra note 104 and accompanying text.

 $^{^{98}}$ See Raymond L. Gold, Ranching, Mining, and the Human Impact of Natural Resource Development 45–46 (1985).

⁹⁴ Id.

⁹⁵ Id. at 46.

⁹⁶ See id.

⁹⁷ Id. at 45; see Weiss, supra note 87, at 422 ("The actors do not define the issue as a decision situation but as a temporary inconvenience . . . [or they] base decisions on implicit rules.").

See, e.g., James G. March, Theories of Choice and Making Decisions, 21 Soc'y 29, 33 (1982). March observes that, in the "conflict systems" organizing much bureaucratic behavior, "information is an instrument of strategic actors . . . [and has] considerably less value than it might be expected to have if strategic considerations were not so pervasive." Id. Legal systems develop norms and rituals to guard against these tendencies for knowledge distortion in

much for its truth as for its potential to advance their cause, and they do not hesitate to conceal or selectively distort it for this purpose. 99 This tendency is apparent in adversarial bureaucratic and legal systems. 100

The very modes of inquiry that government agencies use limit the range of questions that they can ask and the kinds of knowledge that they are able to develop. In general, Western applied science has been oriented toward the production of particular resources and the control of narrowly defined problems, rather than toward comprehension of the ecological and social effects that have followed from its efforts. 101 The resulting gaps in data and method are difficult to fill. "Historical non-issueness" tends to become current and future "non-issueness." ¹⁰² In other words, agencies approach problems in a piecemeal fashion because they lack the perspective and knowledge to do otherwise. They take a positivist approach to applying social knowledge-separating "fact" and "value"-that makes it possible to introduce new knowledge as "data" while keeping the boundaries of their particular policy domain intact. 103 They preserve these boundaries against NEPA-based challenges by interpreting NEPA in strictly procedural terms. 104

Moreover, in contrast to the world of scholarship, where conflicting paradigms may coexist in productive disharmony, the knowledge bases of policy domains tend more strongly toward consistency and are more resistant to change. 105 Agencies create overarching conceptual frameworks in which to make their decisions, and these frameworks almost inevitably become less flexible as time passes. Unable to maintain the type of internal disagreement that gives rise to constructive debate over policy direction and formulation, an agency begins to focus on developing loyalty and weeding out incorrigible dissidents. When presented with new mandates, the agency implements them slowly and incrementally or resists altogether. It

adversarial contexts, as illustrated by the dramatic ritual of the witness swearing "to tell the truth, the whole truth, and nothing but the truth."

⁹⁹ See id.

¹⁰⁰ See id.

¹⁰¹ See Schnaiberg, supra note 51, at 331-32.

¹⁰² See id.

¹⁰³ See Dunn, supra note 85, at 300-02.

¹⁰⁴ Caldwell, supra note 20, at 7, 10.

¹⁰⁵ See Guy B. Adams, The Sensus Communis: A Framework for Valuative Discourse on Public Policy, in Policy Analysis: Perspectives, Concepts, and Methods 169, 172 (William N. Dunn ed., 1986) (discussing "crushing concreteness... [in] tradition" in public policy).

exercises these mechanisms for maintaining policy domain boundaries in an effort to maintain its stability and identity.

In practice, the three lines of inquiry explored here are less distinct than presented, and the investigation is iterative rather than linear. In addition, an effective investigation may depend as much on the investigator having developed a "feel" for the policy domain in question as on the application of formal methodologies. ¹⁰⁶

C. Knowledge and Power in the Domain of U.S. Indian Policy

Every policy domain develops its own distinctive and somewhat stable knowledge base. Because these knowledge bases serve as the foundations for government agency decisions, each policy domain is in fact a means by which social reality is constructed. Decisions originating within the federal Indian policy domain have a notably self-fulfilling quality.¹⁰⁷ They are premised on forms of social knowledge that, for example, cast Native American cultures as anomalous relics or as harmful to the interests of those who participate in them. 108 As a result, they help construct social realities that accord with these premises. To state this significant point differently, highly invasive activities such as mining, road building, timber cutting, and dam construction on Native American lands greatly affect Native American cultures. They contribute to the decline of these cultures. making them less distinct and harming their members through increased alcoholism, violence, suicide, and other concomitants of cultural disruption. Thus, agency decisions to allow such activities create the very social realities that agency decisionmakers misguidedly assume already exist. When such forms of social knowledge become the basis for agency decisions, they have the effect of retrofitting future reality to initially false premises.

¹⁰⁶ See, e.g., Robert K. Yin, Studying the Implementation of Public Programs, in STUDY-ING IMPLEMENTATION, supra note 85, at 36.

¹⁰⁷ Cf. Robert K. Merton, The Self-Fulfilling Prophecy, 8 ANTIOCH REV. 193 (1948).

Notions about the inferiority of Native American culture and its detrimental influences on Native American persons underlie many aspects of federal Indian policy. Federal policies throughout the nineteenth and early twentieth centuries were directed toward "blotting out" the "barbarous dialects" of Native American tribes and "gradually obliterating" their distinct customs and differences. Francis P. Prucha, American Indian Policy in Crisis 21–22 (1976). Few questioned that this effort was in the Indians' best interests. See id. Another commentator, identifying the "stigma of inferiority" inflicted upon Native Americans in the opinions of the United States Supreme Court, explored "the Court's transformation of prejudice into legal principle." Irene K. Harvey, Note, Constitutional Law: Congressional Plenary Power Over Indian Affairs—A Doctrine Rooted in Prejudice, 10 Am. Indian L. Rev. 117, 120 (1982).

As a result, parties that dispute the forms of social knowledge used in agency decisionmaking are involved in "negotiating the very meaning of society."¹⁰⁹ If, in the world of scholarship, social reality becomes translated into social knowledge, then in the world of policy, the relationship often is reversed, and social knowledge—whether initially based on verifiable fact or not—often becomes social reality.

D. The Introduction of Clashing Perspectives into the Indian Policy Domain

NEPA, as an environmental review law, challenges the foundations of existing federal Indian policy by mandating the introduction of new types of knowledge into the agency decisionmaking process. First, NEPA's requirement that agencies use social science methodologies in the preparation of SIA studies under NEPA¹¹⁰ introduces perspectives from the social sciences directly into the public debates surrounding the controversial projects that trigger the EIS process. Second, the statute's provisions for the incorporation of both SIA studies and public input into EISs invite the perspectives of affected communities and peoples into those debates.¹¹¹

Native American perspectives do not collide with the assimilationist premises of federal Indian policy so much as they inhabit an altogether different realm of discourse. It is easy for a tribal elder and an agency administrator to talk past one another, because from a Native American perspective, the well-being of tribal cultures and traditions is integrally related to the well-being of Indian persons. The aims and concerns of social scientists often parallel the aims and concerns of Native Americans and clash with those of the decisionmakers who formulate federal Indian policy. The mandated entry of professional social science into the public decisionmaking process like the introduction of Native American perspectives into that process—may lead to different political, legal, and moral outcomes. It also may result in a different understanding of what are legitimate questions and relevant answers. 112 Part IV of this Article will show how federal Indian policy may be understood as a policy domain whose dominant theme has been and continues to be assimilation. 113

¹⁰⁹ See generally MARCUS & FISCHER, supra note 69.

¹¹⁰ See supra notes 7, 22 and accompanying text.

¹¹¹ See 40 C.F.R. § 1500.2 (1990).

¹¹² See infra notes 194-203.

¹¹³ See Sharon O'Brien, Cultural Rights in the United States: A Conflict of Values, 5 LAW & INEQUALITY 267, 268–69 (1987) (asserting that assimilationist premises undergird minority relations in United States).

IV. THE DOMAIN OF UNITED STATES INDIAN POLICY: ASSIMILATION AND SOCIAL KNOWLEDGE

Why does so much complex and well-meaning knowledge about society turn into increasingly trivial and meaningless politics?¹¹⁴

The domain of United States Indian policy rests on a well-defined body of law, 115 social knowledge, and historical precedent. In the past, Native American religions, languages, customs, and traditions were the objects of active repression. Native Americans were punished if they held ceremonies, children in school were whipped if they spoke their native tongues, and statutes such as the General Allotment Act of 1887¹¹⁶ were enacted to help break down communally oriented tribal social structures and force Native Americans into the dominant social and economic systems. 117 Those in authority often presented these measures, intended to hasten the assumed inevitable assimilation of Native Americans into the dominant culture, as humanitarian rather than oppressive. 118

The focus of official federal Indian policy has tended to shift radically every few decades. ¹¹⁹ Commentators typically characterize the present period as one of Native American "self-determination," ¹²⁰ following the assimilationist "Termination Era" of the 1950s and

¹¹⁴ See Boaventura de Sousa Santos, Room to Manoeuver: Paradox, Program, or Pandora's Box?, 14 LAW & Soc. INQUIRY 149, 162 (1989).

¹¹⁵ See 25 U.S.C. §§ 1–2721 (1988) (codifying federal "Indian law").

^{116 25} U.S.C. §§ 331–334, 339, 341, 342, 348, 349, 354, 381 (1988); see generally D.S. Otis, The Dawes Act and the Allotment of Indian Lands (1973). Known as the Dawes Act, the General Allotment Act of 1887 broke up tribally held reservation lands into individual "allotments" and reverted many remaining lands back to the public domain for sale to non-Native Americans. Senator Dawes indicated the clear assimilationist purpose of the act that was named after him when he said, "[t]he philosophy of the present policy is to treat [the Indian] as an individual, and not as an insoluble substance that the civilization of this country has been unable, hitherto, to digest The last and the best agency of civilization is to teach a grown-up Indian to keep [material possessions]." Id. at 249–50. Theodore Roosevelt heralded the Dawes Act as a "pulverizing engine to break up the tribal mass." O'Brien, supra note 113, at 294.

¹¹⁷ See Arrell M. Gibson, Philosophical, Legal, and Social Rationales for Appropriating the Tribal Estate, 1607 to 1980, 12 Am. Indian L. Rev. 3, 4 (1984) ("From their ideological viewpoint, the intruders could legitimately dispossess the Indian of his land because they were exercising their duty as Christians to enlighten the 'savage.").

¹¹⁸ See id.

 $^{^{119}}$ See Charles F. Wilkinson, American Indians, Time, and the Law 13 (1987).

¹²⁰ See, e.g., Monroe E. Price, Law and the American Indian 86–90 (1973); Mark Allen, Native American Control of Tribal Natural Resource Development in the Context of The Federal Trust and Tribal Self-Determination, 16 B.C. Envil. Aff. L. Rev. 857, 857 n.3 (1989) ("Today... the official federal policy supports tribal self-determination.").

1960s. ¹²¹ It is one thing, however, to proclaim a new policy; implementing that policy through the innumerable and dispersed actions of governance is, as they say, a horse of a different color. ¹²² At their core, such policy shifts represent not just simple changes in the behavior of governmental agencies, but the establishment of new forms of knowledge, new ways of seeing the world, within an existing policy domain. ¹²³ In this light, it seems that the knowledge base of federal Indian policy has changed little over the centuries, and that assimilationist premises still underlie many of the decisions that the various branches of the federal government make. ¹²⁴

What, then, is the social knowledge upon which federal Indian policy is founded? This question opens the door to an interpretive analysis of the knowledge base that supports the Indian policy domain. It is possible to "reason back" from the government's manifest policies to the forms of knowledge that logically would support them. One then may compare these interpretations to historical sources, contemporary social and legal scholarship, and current rhetoric and policy.

Both overt and covert policies for cultural assimilation typically recognize individual "culture carriers" as persons, but neither understand nor value their culture. 125 Federal Indian policy has rested

¹²¹ PRICE, *supra* note 120, at 83-86.

¹²² See Allen, supra note 120, at 886. It is common for a central authority to espouse a new theory or policy, making it doctrine, while allowing dispersed or lower-echelon bodies to continue to act in accustomed grooves. See id. Similarly, Congress may enact laws to implement Native American self-determination only to have the administration in power undercut these laws by acting on the basis of assimilationist paradigms. See id. at 895.

¹²³ That policy implementation often requires the introduction of new forms of knowledge into the policy process as the basis for action is both the point of this paper and the reason that the NEPA "experiment," with its substantive articulation of a new environmental policy and its detailed procedural mandates, is important.

¹²⁴ See infra notes 130–48 and accompanying text. There is some evidence that these self-determination policies are beginning to take effect; however, there are the dangers of confusing the expression of policy for reality and failing to appreciate how remarkably ingrained are the methods by which we discount other cultures and peoples. See O'Brien, supra note 113, at 354–58. It remains simple to find examples of "subtle but powerful attempt[s] by the federal government to assimilate the tribes into mainstream society, a position contrary to the stated federal policy supporting tribal self-determination." Allen, supra note 120, at 886–87.

¹²⁵ See Charles Taylor, Interpretation and the Sciences of Man, in Interpretative Social Science, supra note 69, at 25, 67–68. Taylor intimates at what is involved in understanding other cultures: "It may not just be that to understand a certain explanation [of other cultural ways] one has to sharpen one's intuitions; it may be that one has to change one's orientation—if not in adopting another orientation, at least in living one's own in a way which allows for greater comprehension of others." Id.

The inability of Euro-American society to nurture this quality of understanding for Native American cultures lies behind the most basic issues of Indian law. The legal system that

on notions that Native American cultures impede the progress of Native American people, that these cultures are disappearing anyway, that Native American religious beliefs are not sincere or are wrong or even heathen, and so on. ¹²⁶ Underlying these notions are beliefs in the virtues of American individualism and of respect, at least in principle, for the person, coupled with an inability to appreciate Native cultures on their own terms. ¹²⁷ These converge in the unquestioned premise that Native American persons and their cultures are separate entities. One can find innumerable expressions of this view. Richard Henry Pratt's rhetoric is typical: "[A] great general has said that the only good Indian is a dead one I agree with the sentiment, but only in this: that all the Indian there is in the race should be dead. Kill the Indian in him and save the man." ¹²⁸

The social knowledge base of federal Indian policy still rests largely, as in the past, on simplistic versions of the liberal Western belief in a radical separation between person and culture. On one hand, this belief serves as the foundation for efforts to debunk scientific racism and further social melioration. 129 If all humans are inherently equal and differ only in cultures and circumstances that can be changed, then racist policies become less tenable, and social improvement is possible. On the other hand, in the context of federal Indian policy in particular, this belief has taken the form of an implicit assumption that Native Americans can, with benefit to themselves, be forced through punishment, hunger, and other means to give up their traditional ways. A contemporary expression of this assumption is the view that, if circumstances force Native Americans to abandon their communities in order to find work in the dominant society, they should do so and adapt "like everyone else." Related views monolithically define United States culture as a "melting pot" or as inherently superior to Native American cultures. 130

European settlers brought to the Americas was not adequate to "define that portion of sovereignty retained by Native tribes. Contradiction and confusion concerning Indian law was the inevitable result." Steven B. Anderson, Research Project, Native American Indian Law and the Burger Court: A Shift in Judicial Methods, 8 HAMLINE L. REV. 671, 671–72 (1985); see also Wilkinson, supra note 119, at 3.

 $^{^{126}}$ See infra note 131 and accompanying text. Until recently, Native Americans "were commonly regarded as savages who had no religion. Medicine men . . . were regarded as sorcerers, conjurers, and quacks." Suagee, supra note 14, at 7–8.

¹²⁷ See Anderson, supra note 125, at 671-72.

DAVID H. GETCHES ET AL., CASES AND MATERIALS ON FEDERAL INDIAN LAW 78 (1979) (quoting AMERICANIZING THE AMERICAN INDIAN 260–61 (Francis P. Prucha ed., 1973)). Pratt became head of the influential Carlisle Indian School in 1879 and gained prominence as a reformer of Indian policy and as an educator. PRUCHA, *supra* note 108, at 172–84.

¹²⁹ O'Brien, *supra* note 113, at 272.

¹³⁰ Harvey, supra note 108, at 120; O'Brien, supra note 113, at 268.

Much of contemporary federal Indian policy may be understood as a direct extension of older government programs aimed at forcing assimilation. Today, the goal of assimilation finds expression less in outright oppression than in a studied indifference to Native American concerns in the administration of government programs. An illustrative example is the refusal or inability of one Department of Interior agency after another to consider the sociocultural consequences of various coal leasing programs in southeastern Montana. With the institutions of the dominant society firmly in place on and surrounding reservations, overt oppression has become less necessary to bring Native American resources under non-Native American economic control. What might pass for indifference in this circumstance may indeed be active oppression. 133

In considering the implementation of environmental review law in the Indian policy domain, it is helpful not only to depict the knowledge base of federal Indian policy, but also to gather insights into the dynamics that define and maintain that body of ideas and impressions. While assimilation has governed federal Indian policy, competing paradigms were, and are, always available. In 1880, for instance, public rhetoric in favor of assimilation approached its peak, and Congress enacted the General Allotment Act, ¹³⁴ the single most significant piece of assimilationist legislation. A minority report of the House Committee on Indian Affairs, however, attacked the allotment plan, arguing that dividing tribally held land into small, individual parcels would not turn Native Americans into farmers. ¹³⁵

¹³¹ Howard Stambor, Manifest Destiny and American Indian Religious Freedom: Sequoyah, Badoni, and the Drowned Gods, 10 Am. INDIAN L. REV. 59, 61 (1982) ("[I]gnorance and inadvertence have come to replace the avarice and malice that formerly inspired government attitudes toward the American Indian.").

¹³² See infra notes 176-205 and accompanying text.

¹³³ CLIFFORD GEERTZ, WORKS AND LIVES: THE ANTHROPOLOGIST AS AUTHOR 134 (1988) (quoting Johannes Fabian, Time and the Other: How Anthropology Makes Its Object 149 (1983)). "A persistent myth... has been that of a single decisive conquista, occupation, or establishment of colonial power, a myth which has its complement in similar notions of sudden decolonization and accession to independence. Both have worked against giving proper theoretical importance to overwhelming evidence for repeated acts of oppression, campaigns of pacification and suppression of rebellions, no matter whether these were carried out by military means, by religious and educational indoctrination, by administrative measures, or, as is more common now, by intricate monetary and economic manipulation..." Id. (emphasis added).

One commentator has noted that an important breakthrough in the ability of disciplines such as anthropology and history to examine their own biases was their "recogniz[ing] the mythical elements in colonial perceptions and the active bearing of this mythology on the subjugation and destruction of native people." William S. Simmons, Culture Theory in Contemporary Ethnohistory, 35 ETHNOHISTORY 1, 5 (1988).

¹³⁴ See supra note 116 and accompanying text.

¹³⁵ PRUCHA, *supra* note 108, at 245-46.

According to the report, the Native American's "whole tradition and culture predisposed him against the 'scheme for his improvement, devised by those who judge[d] him exclusively from *their* standpoint instead of from *his*." The momentum in favor of allotment nevertheless proved overwhelming, and the assimilationist paradigm prevailed.

How is knowledge such as that contained in the minority report "organized out" of the decisionmaking process?¹³⁷ The answer is that the mechanisms designed to protect the boundaries of policy domains visibly are working. One easily can discern how the social knowledge that traditionally has defined the federal Indian policy domain has shaped even the most general contours of decisions affecting Native Americans. For example, the judiciary has been ambivalent in developing legal principles that could protect tribes as corporate entities¹³⁸ and virtually silent in developing principles that would go further and protect tribal culture and tradition. 139 Courts have chosen not to see the detrimental impacts that the "atrophy of tribal life and its traditional economy and culture"140 have on Native Americans as the grounds for extending the federal trust responsibility into even such simple areas as the provision of needed services to tribes, 141 much less as a basis for protecting traditional tribal culture. Similarly, the stated purpose of the American Indian Religious Freedom Act (AIRFA) of 1978¹⁴² is to protect Native religions against egregious interference by federal authorities. The judiciary, however, provides little support for Native American interests when federal agencies, pursuing other interests, ignore AIRFA because it is more convenient to them to do so. Congress framed AIRFA to

¹³⁶ Id.

¹³⁷ See supra note 91 and accompanying text.

¹³⁸ See Wilkinson, supra note 119, at 56. This remains true today. The Burger Court, for example, balanced Native American sovereignty as only one of many variables that "the Court [would] weigh when faced with the multiple interests present within cases involving . . . [Native American tribal jurisdiction]." Anderson, supra note 125, at 672. Although an underlying purpose of the federal trust responsibility is to protect tribal self-government, not one court has stated that federal agencies can be enjoined from an action interfering with tribal autonomy. Reid P. Chambers, Judicial Enforcement of the Federal Trust Responsibility to Indians, 27 Stan. L. Rev. 1213, 1242–43 (1975).

¹³⁹ Courts often have articulated their prejudices toward Native American culture. Harvey, supra note 108, at 138. Harvey attributes the development of the doctrine of federal plenary power over Native American affairs to such negative perceptions. *Id.* at 118–19, 138–48.

¹⁴⁰ Chambers, supra note 138, at 1244.

¹⁴¹ Id. at 1243-45.

¹⁴² 42 U.S.C. § 1996 (1988).

allow administrative balancing of competing interests. 143 The result is an act that is virtually without "teeth" in the courts. 144

This discussion must close with two caveats. First, while the boundaries of the established Indian policy domain seem impenetrable, like all social phenomena, they are inherently flexible. If humans are aptly characterized as "self-defining beings," then fundamental changes can be effected in federal Indian policy. Second, although the body of social knowledge underlying the Indian policy domain has remained fairly consistent, federal Indian policy as implemented has not merely fluctuated, but been notoriously inconsistent. 146

Nonetheless, when one focuses on the beliefs underlying federal Indian policy, its wild swings seem less severe and more like variations on a theme. For example, most scholars regard the Indian Reorganization Act (IRA) of 1934 as inaugurating a distinctly new policy—promoting the reconstitution of tribal governments—in reaction to the excesses of the allotment period. One may argue, however, that the IRA merely signalled a shift from the individualist mode of assimilation that drove allotment to a corporatist mode that accorded with the emergence of the corporation in everyday life. The IRA undoubtedly was a reaction to the devastation of allotment. Nevertheless, it reflected assimilation in a different guise rather than a new-found respect for Native American culture. The com-

¹⁴³ Ellen M.W. Sewell, *The American Indian Religious Freedom Act*, 25 ARIZ. L. REV. 429, 468 (1983).

Suagee, supra note 14, at 2–3. Suagee pointed out that, "[i]n all of the cases in which Indians have sought access to and protection of religious properties located on public lands, and federal land managers have declined to accommodate the Indian concerns, the Indians have not been successful in obtaining the relief they have sought from the courts, with the exception of one very recent case" Id. The United States Supreme Court, however, reversed this "exception" in 1988. See Lyng v. Northwest Indian Cemetary Protective Ass'n, 485 U.S. 439 (1988) (see discussion infra notes 156–75 and accompanying text). As a result, AIRFA has failed altogether to protect Native American sacred sites or worship on public lands.

¹⁴⁵ Taylor, supra note 125, at 67.

¹⁴⁶ For differing perspectives on the historical shifts in federal Indian policy, see Felix S. Cohen, Handbook of Federal Indian Law 47-206 (Rennard Strickland et al. eds., 1982); Price, supra note 120, at 68-92; Robert S. Pelcyger, Justices and Indians: Back to Basics, 62 Or. L. Rev. 29, 31 (1983); see generally Wilkinson, supra note 119.

¹⁴⁷ See Cohen, supra note 146, at 144–45. The IRA embodied "an emerging historical and anthropological respect for the tribes, in contrast to the previous desire to see Native Americans wholly assimilated into mainstream America." Allen, supra note 120, at 862.

¹⁴⁸ Kenneth R. Peres, The Political Economy of Federal Indian Policy 283–87 (1989) (unpublished Ph.D. dissertation, New School for Social Research, Graduate Faculty). The IRA became "a form of assimilation, because tribal custom was not the basis of the written [tribal] constitutions." Allen, *supra* note 120, at 863.

monly accepted portrait of federal Indian policy as comprising markedly distinct eras, while not inaccurate, may overlook the extent to which the theme of assimilation consistently has dominated the approach of the government to Native Americans.

V. THE CLASH OF SOCIAL KNOWLEDGE PERSPECTIVES UNDER NEPA

A. NEPA's Mandates Within the Conceptual Framework of the Indian Policy Domain

Statutes, regulations, and judicial decisions have determined that NEPA applies to Native Americans and their reservations. A federal agency implements NEPA within the context of the Indian policy domain when the agency undertakes an SIA study, holds a public hearing, or otherwise solicits social science knowledge for use in the evaluation of a proposed administrative action, and the study, hearing, or action involves Native Americans. These occasions set in motion the conflicting forces of federal Indian policy and environmental review law.

On one hand, the images and symbols on which the knowledge base of the Indian policy domain is predicated tend subtly, or not so subtly, to define the conceptual framework within which government decisionmakers try to implement NEPA's vague mandates for the use of social knowledge. The triumvirate of individualism, work, and money as "American" values, the notion of Native American cultures as primitive, and the continued existence of racial stereotypes swing into action when the decisionmaking process begins. On the other hand, NEPA's procedural requirements for study, analysis, and public participation introduce a range of differing perspectives directly into the decisionmaking process and define them as relevant to the issues at hand. These requirements work to neutralize the mechanisms that preserve the boundaries of the Indian policy domain. This oppositional dynamic is visible in public policy disputes that invoke NEPA and involve Indian tribes.

¹⁴⁹ See, e.g., Davis v. Morton, 469 F.2d 593, 598 (10th Cir. 1972) (NEPA applies to Indian reservations). Most, if not all, of the federal agency regulations implementing environmental review law refer specifically to "Indians." See, e.g., 40 C.F.R. pts. 1500–1508 (1990) (CEQ regulations implementing NEPA).

¹⁵⁰ Through environmental review laws, "professionals of the disciplines of cultural resources management have institutionalized access to influence federal agency decision making." Suagee, *supra* note 14, at 17. Without such statutes, "there might be very little communication between the inhabitants of these two worlds—federal officials and traditional Indians." *Id.*

B. Medicine Wheel and Lyng v. Northwest Indian Cemetery Protective Ass'n: Illustrations of the Oppositional Dynamic Between Federal Indian Policy and NEPA

The Medicine Wheel, a prehistoric stone structure in the Big Horn Mountains of northern Wyoming, is a sacred site for several Native American tribes whose religious practitioners regularly worship there. 151 Nonetheless, before late 1989, the United States Forest Service (USFS) had managed the site as if it had no contemporary religious value. Until recently, a sign on the nearby highway proclaimed that the Medicine Wheel was "an historic Indian relic;" 152 now a new sign calls the site "an historic landmark." In 1989, the USFS began to pursue plans to log in the immediate vicinity of the site, in the areas that Native Americans use for worship and privacy, and to develop the site itself as a tourist attraction with a parking lot, a large visitor center, and a boardwalk overlooking the Medicine Wheel. 153 Tribal representatives experienced great difficulty in getting the USFS to heed NEPA's impact review provisions, let alone recognize the tribes' concerns about the potentially devastating effects of the proposed activities. 154 For example, at one meeting, an exasperated USFS official reportedly told tribal elders that "there are no spirits there [The Medicine Wheel is] just a pile of rock."155

¹⁵¹ The Medicine Wheel, where Native Americans from the Great Basin and Northern Plains have worshipped for generations, is regarded as the "altar" of the sacred Medicine Mountain. Interview with William Tall Bull, Chairman of the Northern Cheyenne Cultural Committee of the Northern Cheyenne tribe, in Billings, Mont. (Nov. 17, 1989).

¹⁵² Id.

¹⁵³ Henry F. Smeal, The Battle of the Big Horn Medicine Wheel: Religious Freedom, Self-Determination, and Political Power Among the Plains Indians 3-4 (1989) (unpublished manuscript on file with the Department of Anthropology, Columbia University).

¹⁵⁴ Interview with William Tall Bull, Chairman of the Northern Cheyenne Cultural Committee of the Northern Cheyenne tribe, in Billings, Mont. (Nov. 17, 1989). The USFS recently responded to tribal requests, and to the growing controversy surrounding its management of the Medicine Wheel site, by preparing a draft EIS. U.S. DEP'T OF AGRIC., MEDICINE WHEEL NATIONAL HISTORIC LANDMARK DRAFT ENVIRONMENTAL IMPACT STATEMENT (1991). At this writing, the official comment period is still open. The author knows, however, that many inhabitants of the affected reservations feel that the draft EIS does not address their concerns, in part because it fails to incorporate the alternative management plan that certain of these inhabitants had proposed.

In addition, the "preparers" of the EIS do not include any Native American cultural experts, ethnographers, or cultural anthropologists who could address Native American concerns. Although the issues involved in managing the Medicine Wheel as a Native American sacred site are social and cultural, the EIS preparers all have degrees in natural science or natural resource management, with the exception of two "archaeologists," who do not possess graduate degrees and have the least work experience of any of those involved. *Id*.

¹⁵⁵ Interview with Nicol Price, Coordinator of the Medicine Wheel Alliance (May 22, 1990);

Some of the tribes' difficulties in the Medicine Wheel case likely were exacerbated by a 1988 Supreme Court opinion, Lyng v. Northwest Indian Cemetery Protection Ass'n. ¹⁵⁶ In Northwest Indian Cemetery, several California tribes brought suit against the USFS in order to enjoin agency plans to develop roads and log in their sacred areas. ¹⁵⁷ The United States District Court for the Northern District of California and then the United States Court of Appeals for the Ninth Circuit ruled that the tribes had a right under the First Amendment to religious freedom, ¹⁵⁸ but the USFS appealed to the Supreme Court. Justice Sandra Day O'Connor wrote a majority opinion that reversed the lower courts and allowed the USFS to proceed with its plans. ¹⁵⁹ At this writing, however, the USFS has not yet commenced the proposed road building or logging.

A great deal more could be said about *Northwest Indian Cemetery*. Here, however, the essential point is that the Court chose not to recognize the cultural distinctiveness of either the tribes or their religion. Justice O'Connor acknowledged that the respondents' beliefs were "sincere," and that the USFS's plans to build roads and log in the areas they use for exercising their religious beliefs would have significantly detrimental impacts on their practice of their religion. ¹⁶⁰ Despite this finding, however, the Court still found that the proposed agency action in question would not "penalize religious activity by denying any person an equal share of the rights, benefits, and privileges enjoyed by other citizens." ¹⁶¹

How could a governmental action devastate a people's religious practice and not deprive those people of the right to religious freedom "enjoyed by other citizens?" The United States Constitution, after all, will continue to protect these "other citizens" in the practice of their religions. The Court glossed over this inconsistency by construing the Native American practices in question as individual pref-

Smeal, *supra* note 153, at 10. The USFS seems to have changed its position since this Article first was written in the fall of 1989, but the major issues remain unresolved at this writing.

^{156 485} U.S. 439 (1988).

¹⁵⁷ Id. at 443.

¹⁵⁸ The United States District Court for the Northern District of California ruled that the proposed USFS actions would "burden the free exercise of plaintiffs' religion." Northwest Indian Cemetary Protective Ass'n v. Peterson, 565 F. Supp. 586, 595 (N.D. Cal. 1983). The United States Court of Appeals for the Ninth Circuit upheld this judgment. 795 F.2d 688, 688–89, 691–93 (9th Cir. 1986).

¹⁵⁹ Northwest Indian Cemetery, 485 U.S. at 442.

¹⁶⁰ See id. at 447. The Court also stated that "[t]he government does not dispute, and we have no reason to doubt, that the logging and road-building projects at issue in the case could have devastating effects on traditional Indian religious practices." *Id.* at 450.

¹⁶¹ Id. at 449.

erences rather than as the foundation for the cultural identities of the tribes. 162 Referring to the respondents' use of the sacred "High Country" that the USFS plans to log, the Court noted that individuals primarily used the area for their own "personal spiritual development" in the belief that their activities advanced "the welfare of the tribe, and indeed, of mankind itself."163 There is no indication that the Court understood the tribes' religion as the property of a distinct society and culture. Rather, in the Court's view, what was threatened were merely the religious practices of particular individuals. As individuals, Native Americans may believe that their practices are important for their tribe and for "mankind itself." This reference to tribe and "mankind" merely secures the idiosyncratic nature of Native American beliefs in the Court's construction, however, because few in the dominant society would concede that vision quests by members of little-known tribes in an obscure corner of a national forest are essential to the advancement of humanity.

In stating the issue in these terms—as a matter of "private persons' ability to pursue spiritual fulfillment according to their own religious beliefs"¹⁶⁴—the Court employed "knowledge disavowal" and "non-decision"¹⁶⁵ to deflect all questions regarding the cultural uniqueness of Native American religion. Only by cleaving to such radical "culture blindness,"¹⁶⁶ a blindness consonant with the knowledge base of the Indian policy domain, can the Court maintain that government actions that might destroy Native American religions nonetheless will not deny any individual "an equal share of the rights, benefits, and privileges enjoyed by other citizens."¹⁶⁷ Of course government plans to log Native sacred areas do not deny Native Americans, as individual citizens, the right to practice the same religions as "other citizens," but such a conclusion constitutes an outrageous dismissal of Native American cultural differences. The Court de-

¹⁶² See id. at 452. The Court constructed the issue as one of individual rights by selecting as its governing precedent, from among earlier First Amendment cases, a holding that the Free Exercise Clause does not "require the Government to conduct its own internal affairs in ways that comport with the religious beliefs of particular citizens.... "The Free Exercise Clause affords an individual protection from certain forms of governmental compulsion; it does not afford an individual a right to dictate the conduct of the Government's internal procedures." Id. at 448 (emphases added) (citing Bowen v. Roy, 476 U.S. 693, 699–700 (1986)).

¹⁶³ Id. at 451.

¹⁶⁴ Id. at 449.

¹⁶⁵ See supra notes 87–92 and accompanying text.

 $^{^{166}}$ Ernest Gellner, *The Stakes in Anthropology*, 57 Am. SCHOLAR 17, 23 (1988). "America is inclined to culture-blindness because, on the whole, it takes its own luminously individualist culture for granted, and sees it as manifestly obvious." *Id.*

¹⁶⁷ Northwest Indian Cemetery, 485 U.S. at 449.

cided, however, that government would not be able to function at all, let alone effectively, if it had to fulfill the religious needs of every citizen. According to the Court, the First Amendment must apply to all citizens alike 169 In such statements, we see how the assimilationist canon, its harsh articulation from the turn of the century only slightly softened, underlies the Court's rationale in this case. 170

Conversely, the strongly worded dissent illustrates how NEPA, as an environmental review law, sets in motion an opposing force within the Indian policy domain. The Indian policy domain. The Indian policy informs agencies implementation of NEPA in that domain, NEPA simultaneously requires the use of criteria different from those that define the domain's boundaries. The dissent, in marked contrast to the majority opinion, implicitly acknowledges this dynamic. It draws from an anthropological report, commissioned by the USFS under NEPA and AIRFA mandates, The interior is the fact that USFS plans likely would devastate a people's religion, but also the understanding that Native American culture differs significantly from the dominant culture. The dissent draws on this recognition in concluding that such cultural differences must be recognized as legally relevant to the definition of religious rights.

¹⁶⁸ Id. at 452.

¹⁶⁹ Id.; cf. Sewell, supra note 143, at 441 ("Whenever universalistic egalitarian principles are applied to Indians in the guise of extending individual rights, there is the danger that valuable tribal rights will be taken away, and nothing given in return."). Commentators have noted tensions between American individualism and cultural rights in other contexts as well. See, e.g., Carol J. Greenhouse, Anthropology at Home: Whose Home? 44 Hum. Organization 261, 263–64 (1985). One commentator explained that individualism "does not lend itself readily to diversity It is a cultural logic that generates outsiders, since anyone who is perceived to be 'different' jeopardizes the social order by challenging its limits [It is this] equation of culturality and citizenship . . . that makes pluralism so conceptually difficult." Id.

¹⁷⁰ See Stephen L. Pepper, The Conundrum of the Free Exercise Clause—Some Reflections on Recent Cases, 9 N. Ky. L. Rev. 265, 280–81 (1982) ("Freedom of religion lies at the core of the fundamental problem of encompassing substantially different cultures within one political entity. It is thus a constitutional problem in the deepest sense, not only a problem of interpreting a particular phrase in a particular document, but a problem of constituting a functional polity from disparate and divergent groups and cultures.").

¹⁷¹ Northwest Indian Cemetery, 485 U.S. at 458-77.

¹⁷² Id. at 459.

 $^{^{173}}$ Id. at 460. At first, the dissent identified the issue as one of a threat to a religion, not simply to the preferences of individual citizens. Id. at 458. It proceeded to discuss unique aspects of Indian religions and cultures, considerations to which the majority opinion gave minimal attention. Id. at 460–62.

¹⁷⁴ Id. at 460. The dissent asserted that, "[w]here dogma lies at the heart of western religions, Native American faith is inextricably bound to the use of land." Id. at 460-61. This

If one follows the dissent's nonassimilationist approach and views cultural differences as relevant to public decisionmaking, then the Court's reasoning in Northwest Indian Cemetery only can appear baffling or absurd. The dissent expresses this sense of anomaly when it notes "the cruelly surreal result" of the majority opinion: an agency action that basically will "destroy a religion is nevertheless deemed not to 'burden' that religion."175 Thus, while environmental review law requirements in the Indian policy domain must filter through the assimilationist approach that is the domain's conceptual framework, they also act powerfully to introduce clashing paradigms into public debate. Northwest Indian Cemetery demonstrates how NEPA's mandate for social impact review introduces new perspectives into the federal Indian policy domain and legitimates them in that context, even when they do not prevail. Implementing NEPA in the Indian policy domain ultimately makes explicit both the clash of cultures within that domain and the contrasting values existing within the dominant culture.

C. Northern Cheyenne Tribe v. Hodel: Another Illustration

Beginning in the mid-1960s, the BIA, an agency within the United States Department of the Interior (DOI), initiated a leasing program that eventually committed over fifty percent of the Northern Cheyenne reservation in rural southeastern Montana to mining and coalfired power plant construction. ¹⁷⁶ Neither the BIA nor any other agency, however, considered the potential sociocultural impacts of the lease sales on the Northern Cheyenne tribe or informed the tribe's members of the likelihood of such impacts, even though the later lease deals occurred after the enactment of NEPA in 1969. The tribe passed a resolution in 1973 asking the Secretary of the Interior to withdraw approval of the leases. The attorney for the tribe found what he later described as "a staggering array of law violations" associated with the lease program. ¹⁷⁷ The DOI suspended the leases

case thus "represents yet another stress point in the longstanding conflict between two disparate cultures" Id. at 473.

¹⁷⁵ Id. at 472 (Brennan, J., dissenting). Sewell avers that the results of previous cases protecting either individuals against government action that violated their religious beliefs or religious practices deemed central to an institutionalized religion become "absurd as applied to Indians, especially those who have long lived or worshipped in territory now managed by the federal government" Sewell, supra note 143, at 456; see also Pepper, supra note 170, at 283 n.89.

¹⁷⁶ Steven Chestnut, Coal Development on the Northern Cheyenne Reservation, in U.S. COMM'N ON CIVIL RIGHTS, ENERGY RESOURCE DEVELOPMENT 159 (1978).

¹⁷⁷ Id. at 166.

in 1974, 178 and in 1980, Congress enacted special legislation to cancel them. 179

In the late 1970s, hard on the heels of the lease cancellations, the United States Geological Survey (USGS)—also a DOI agency—and the state of Montana jointly prepared a regional EIS for a planned Northern Plains coal leasing program. 180 The areas proposed for leasing surrounded the Northern Chevenne reservation and were near the Crow reservation, but did not include Indian-owned coal. Moreover, the EIS study area did not include the affected reservations, leaving a conspicuous blank space in the middle of the study area map. 181 Although impacts from industrial projects in rural areas do not stop at political boundaries, the USGS and the state of Montana did no more than vaguely acknowledge the potential social impacts of the proposed leasing program on the reservations. 182 A lawsuit alleging that the lack of tribal involvement in the EIS process resulted in an inadequate analysis of the program's implications seemed imminent, but the government agencies abandoned the program. 183

In 1982, the United States Bureau of Land Management (BLM) initiated the Northern Powder River Round I coal leasing program, which repeated all the same, now familiar, legal mistakes. ¹⁸⁴ This program was, at the time, the largest proposed sale of federal coal

 $^{^{178}}$ The Secretary of the Interior announced his decision to suspend the Northern Cheyenne coal leases on June 4, 1974, noting that "the tribe's petition presents extraordinary circumstances." Id. at 174 app. B. In suspending the leases, the Secretary cited his recognition of his trust responsibility to the tribe, and the seriousness of the alleged law violations. Id. at 172–75.

¹⁷⁹ Act of October 9, 1980, Pub. L. No. 96-401, 94 Stat. 1701 (1980).

¹⁸⁰ U.S. GEOLOGICAL SURVEY & MONT. DEP'T OF STATE LANDS, DRAFT ENVIRONMENTAL IMPACT STATEMENT: NORTHERN POWDER RIVER BASIN COAL, MONTANA (1979).

¹⁸¹ Id. at inside front cover.

The Summary of the Draft EIS (DSEIS) makes no mention of the substantial and significant Native American populations in the study area. Id. at iii–v. An "Attachment" to the Summary does not list either the Northern Cheyenne or the Crow tribes among the agencies or organizations that were invited to comment on the DSEIS. Id. at vii–viii. One cannot identify sections dealing with Native Americans by looking at the Table of Contents. Id. at ix–xiv. The DSEIS claims to consider "any impact the proposed developments would have on the reservations." Id. at pt. I, at 1. In fact, while the DSEIS refers to Native American populations, it provides no impact analyses regarding the tribes. See, e.g., id. at pt. II, at 20, 110–11; id. at pt. IV, at 46, 69; id. at pt. VIII, at 13.

¹⁸³ Note here, in light of the history just recounted, the remarkable perseverance of domain boundaries and especially of their underlying knowledge paradigms. *Cf. supra* note 105 and accompanying text.

¹⁸⁴ Northern Cheyenne Tribe v. Hodel, 842 F.2d 224, 226 (9th Cir.), modified, 851 F.2d 1152 (9th Cir. 1988).

in the nation's history. 185 The planned lease tracts surround the Northern Cheyenne reservation on three sides, with all of the tracts lying within sixteen miles of the reservation border. 186 Modern coal development of this magnitude constitutes a massive industrial intrusion into such an agriculturally based society. Still, the leasing tract profiles were prepared, the final tracts selected, and a final EIS written, all with barely a mention of the Northern Chevenne tribe or its reservation. 187 The Northern Cheyennes brought suit in 1982, 188 alleging violations of NEPA and the federal government's trust responsibility. 189 The United States District Court for the District of Montana found that the BLM had failed to consider impacts to the Northern Cheyenne tribe in its leasing program and therefore had violated NEPA, the Federal Coal Leasing Amendments Act (FCLAA) of 1976, 190 DOI regulations promulgated pursuant to FCLAA, 191 and the government's trust responsibility to the Northern Chevenne tribe. 192

Just as in *Northwest Indian Cemetery*, the NEPA review process broke down at the point where the statute required the collection and use of sociocultural information in the formulation of an agency decision. *Northern Cheyenne Tribe v. Hodel* illustrates how the dynamics of domain boundary maintenance often play themselves out in debates over methodological issues such as what questions it is legitimate to ask, which data are relevant, and so on. In other words, the case shows how fundamental conflicts between different sets of values are played out as procedural or technical arguments.¹⁹³

In Northern Cheyenne Tribe, the BLM argued that, rather than ignoring the tribe in drafting the required EIS, agency researchers

¹⁸⁵ Northern Cheyenne Tribe v. Hodel, 12 Indian L. Rep. (Am. Indian Law. Training Program) 3065, 3065 (May 28, 1985).

¹⁸⁶ Id.

¹⁸⁷ Northern Cheyenne Tribe, 842 F.2d at 226.

⁸⁸ Id

¹⁸⁹ Id. For an assessment of the significance of Northern Cheyenne Tribe in the context of federal trust responsibility, see Adele Fine, Off-Reservation Enforcement of the Federal-Indian Trust Responsibility, 7 Pub. Land L. Rev. 117, 129–33 (1986).

¹⁹⁰ Pub. L. No. 94-377, 90 Stat. 83 (codified in scattered sections of 30 U.S.C.).

¹⁹¹ Department of the Interior Regulations Pertaining to Coal Management, Federally Owned Coal, 43 C.F.R. § 3400 (1981).

¹⁹² Northern Cheyenne Tribe v. Hodel, 12 Indian L. Rep. (Am. Indian Law. Training Program) 3065, 3075 (May 28, 1985).

 $^{^{183}}$ "Questions of aesthetics, of human dignity, and of religious belief underlie many allegedly scientific disputes." Jasanoff and Nelkin, supra note 58, at 1214. However, "proposals that seek to develop factual justification for ethical decisions often represent an extension of scientific rationality to inappropriate areas." Id.

had chosen to "deal with the Indians simply as people affected by the sale and their reservation as any other real estate in the sale area."194 This is classic assimilationist doctrine, identical to that explicitly governing federal Indian policy a century ago¹⁹⁵ and advanced here for tactical purposes as a professional research strategy. Presented as a question of methodology, the decision to "whitewash" the Northern Cheyennes was in fact a transparent policy choice, by BLM administrators, that reflected the distorted knowledge base governing the Indian policy domain. Relying on the assumption that distinctive Native American culture either does not exist or is irrelevant, the agency laid the groundwork for a decision that would "retrofit" social reality to meet its assumption. 196 Its decision to permit massive industrial development in a rural area without regard for the impacts on the Native American communities in that area was a decision to erode the uniqueness of these communities and their ability to survive, and to bring reality closer to the mistaken premises underlying the decision.

The court, however, rejected the BLM's argument and held that the Northern Cheyenne tribe was "culturally distinct."¹⁹⁷ Thus, according to the court, the BLM's supposition that it could treat the tribe in an SIA study merely as another group of citizens whom the proposed leasing program might affect was "faulty."¹⁹⁸ In making the empirical finding that the Northern Cheyennes' culture is different from the dominant culture, the court signaled the type of social knowledge it found legally relevant in the particular policy context.

The court's decision did not answer an empirical question, because the cultural distinctiveness of the Northern Cheyenne tribe was not truly at issue. The fact that a definable Northern Cheyenne cultural identity exists has been documented for more than a century. ¹⁹⁹ The BLM could not argue that the tribe lacks a unique culture, because

 $^{^{194}}$ Northern Cheyenne Tribe, 12 Indian L. Rep. (Am. Indian Law. Training Program) at 3068.

 $^{^{195}}$ See, e.g., Getches et al., supra note 128, at 69–79; see also supra notes 114–48 and accompanying text.

¹⁹⁶ See supra notes 107–09 and accompanying text.

 $^{^{197}}$ Northern Cheyenne Tribe, 12 Indian L. Rep. (Am. Indian Law. Training Program) at 3068.

¹⁹⁸ Id

¹⁹⁹ See generally Karl N. Llewellyn & E. Adamson Hoebel, The Cheyenne Way, Conflict and Case Law In Primitive Jurisprudence (1941); Peter J. Powell, Sweet Medicine (1969); John Stands in Timber & Margot Liberty, Cheyenne Memories (1967).

such an argument would not have been credible. Rather, the agency simply regarded this fact as irrelevant to its EIS and hence to its decisionmaking process.²⁰⁰ The issue was not whether the fact of a distinct Northern Cheyenne culture was valid or verifiable, but whether the mass of documented knowledge supporting this fact fell within the established Indian policy domain: whether such knowledge bore on the policy decisions at hand.²⁰¹ In essence, the issue was one of the inclusion or exclusion of potentially relevant knowledge. In *Northern Cheyenne Tribe*, then, when the court asserted the facticity of Northern Cheyenne cultural identity, it signalled its intention to regard this identity as legally salient.

Having defined the range of relevant discourse to include a recognition of Northern Cheyenne culture, the court concluded that DOI "obvious[ly]" had to consider the impacts, including the social and economic impacts, of its proposed coal development on the Northern Cheyenne tribe.²⁰² According to the court, merely consulting a map and noting the proximity of the proposed lease tracts to the reservation logically led to this conclusion.²⁰³

At least at the district court level, *Northern Cheyenne Tribe* illustrates how a legal decision that sets a new frame of reference in place in a policy domain can moot problems such as an alleged lack of relevant data and the unwillingness of agencies to consider how their actions might affect disparate groups. In response to the district court's ruling, the BLM prepared a supplemental EIS for the leasing program.²⁰⁴ While it was by no means perfect, this supplemental EIS used credible original research and responded to the

²⁰⁰ The court underscored that the substantive intent behind the EIS requirement was not simply research for its own sake, but rather the gathering of information for decisionmaking. See Northern Cheyenne Tribe, 12 Indian L. Rep. (Am. Indian Law. Training Program) at 3074.

²⁰¹ Cf. Santos, *supra* note 114, at 162–63 ("[T]he gigantic body of knowledge accumulated by the social sciences has shown a total incapacity to change the existing mystifying common sense").

 $^{^{202}}$ $Northern\ Cheyenne\ Tribe,\ 12$ Indian L. Rep. (Am. Indian Law. Training Program) at 3068.

²⁰³ Id. For more on Northern Cheyenne Tribe, see Boggs, SIA in Legal Theory and Practice: The Northern Cheyenne Tribe v. Hodel, 12 Soc. IMPACT ASSESSMENT 3 (1988); Fine, supra note 189, at 129–32; Freudenburg, supra note 22, at 455; Freudenburg & Keating, supra note 36, at 592.

²⁰⁴ Northern Cheyenne Tribe v. Hodel, 842 F.2d 224, 226–27 (9th Cir.), *modified*, 851 F.2d 1152, 1157 (9th Cir. 1988); U.S. Bureau of Land Management, Draft Economic, Social and Cultural Supplement: Powder River I Regional EIS (1989). The Final Supplemental EIS was issued in June 1990.

concerns of the Northern Cheyenne and Crow tribes. For example, the BLM sponsored an ethnographic study to evaluate the impacts of the program on the tribes' cultural and religious activities.

Although Northern Cheyenne Tribe is still in the courts, the Northern Cheyenne tribe's successes to date show that effective implementation of NEPA's social impact review requirements is achievable, even in the midst of adversarial circumstances that are further fueled by cultural differences.²⁰⁵ Again, the question is not simply government agencies' compliance with NEPA's procedural requirements in making obscure administrative decisions. The conflict is over the forms of social knowledge on which these agencies will base their policy actions and thus over the construction of social reality itself.

In Northwest Indian Cemetery, an anthropological report that the USFS had commissioned early in the planning process demonstrated both the cultural distinctiveness of the religious practices threatened by the logging that the USFS had proposed, and the deep significance of those practices to the tribes that believed in them. ²⁰⁶ The lower court decisions and the dissenting Supreme Court opinion illustrate how the NEPA mandates for social impact review made the knowledge contained in this report legally relevant, even though the base of social knowledge that traditionally has governed federal Indian policy still controlled the Court's framing and disposition of the case. Similarly, Northern Cheyenne Tribe demonstrates both the staying power of the social knowledge that underlies the Indian policy domain and the confrontational dynamic that environmental review law's introduction of new forms of social knowledge into that domain creates.

VI. CONCLUSION

NEPA, as an "environmental overlay on the statutory responsibilities of all federal agencies," introduces into the domain of fed-

²⁰⁵ Two of the companies that purchased leases for new mines just east of the reservation have asked DOI to cancel their leases. Noting that the supplemental EIS "found serious impacts to the tribe," the companies fear mitigation requirements and continuing litigation. See Thackeray, BILLINGS GAZETTE, June 11, 1991, at 1, col. 3. Most recently, the United States District Court for the District of Montana concluded that, "as a matter of fundamental fairness," the companies should not have to pay for the Secretary of the Interior's "own lack of diligence in shaping the proper remedy for his previous mistakes," and has granted the companies' request. Northern Cheyenne Tribe v. Lujan, No. CV 82–116–BLG–JFB, slip op. at 23 (D. Mont. July 24, 1991).

²⁰⁶ See supra notes 156-75 and accompanying text.

²⁰⁷ MANDELKER, supra note 2, at 1-2.

eral Indian policy forms of social knowledge that directly clash with the beliefs that have governed institutionalized federal Indian policy for centuries. In NEPA cases that concern Native American interests, the underlying disputes are about broad, conflicting paradigms that the parties rarely make explicit. These paradigms remain cloaked in narrow facts and legal technicalities. They nonetheless constitute a real dimension in the agency decisionmaking process.

NEPA's mandate for large-scale use of social science tends to force these underlying paradigms nearer the surface. In NEPA cases, it becomes clear that recent developments within the social sciences may compete not only with older concepts and among themselves in the pages of scholarly journals, but also in legislative halls and courtrooms as tools for setting public policy. Needed are methods not only for making these developments more openly a part of the public debate, but also for applying them more systematically in the various contexts that compose the public sphere.²⁰⁸

Because NEPA expressly requires the use of social knowledge, disputes over the EIS process most fundamentally become arenas for the negotiation of meanings: meanings that simultaneously derive from and structure social relations and the quality of peoples' lives. In this light, the issues of quality, substance, and focus in SIA studies are hardly irrelevant to the political nature of the EIS process—mere epiphenomena over which the hard realities of power relations, proceduralist interpretations, and legal and administrative technicalities rule. If anything, the opposite is true: political jockeying revolves around the substantive issues that are embedded in differing knowledge paradigms, and the real question is which knowledge will be legitimated as relevant to policy. Only after answering that question do agency decisionmakers engage the more familiar question of which forms of knowledge, so legitimized, will govern decisions.

If the ability to define the meanings by which people live constitutes power,²⁰⁹ then efforts to keep conflicting forms of knowledge

²⁰⁸ Frederic G. Reamer, *Principles of Ethics and the Justification of Policy, in Policy* Analysis: Perspectives, Concepts and Methods, *supra* note 105, at 223, 236. ("When we construct public policy, we are engaged in far more than mere cognitive gymnastics; we are inventing frameworks that will affect people's lives, we hope for the better. Philosophical discourse tends to push us to think through in a disciplined way the ideas we are about to unleash upon the world, and it is important to identify and examine critically our differences of opinion.").

²⁰⁵ John P. Esser & David M. Trubek, From "Scientism Without Determinism" to "Interpretation Without Politics", 15 LAW & Soc. INQUIRY 171, 175 (1990).

out of policy discourse makes good sense to those in power. Forthright exercises of agency power, countermoves in response to NEPA's introduction of uncomfortable knowledge into agency decisionmaking, undoubtedly account for the seemingly anomalous absence of social science or Native American perspectives in many SIA studies. It is not inevitable, however, that social science in the agency decisionmaking process must be the victim of politics. Nor is the production of high-quality SIA studies an unrealistic goal. Rather, it is a practical, achievable, and pragmatically significant one. ²¹⁰ Indeed, the interplay of forces in NEPA cases illustrates the critically important role of social science in helping articulate "a richer 'philosophical anthropology' as the theoretical groundwork for a shared public philosophy: "²¹¹ an emerging and truly democratic public philosophy to be shared widely in a culturally diverse world.

The Berger inquiry in Canada constitutes perhaps the most notable example of Native American perspectives being introduced into policy discourse by environmental review law processes. Thomas Berger, Northern Frontier, Northern Homeland: Report of the Mackenzie Valley Pipeline Inquiry (1977); see also D.J. Gamble, The Berger Inquiry: An Impact Assessment Process, 199 Sci. 946–51 (1978); Charles F. Wilkinson, Book Review, 29 Nat. Resources J. 1097–99 (1989) (reviewing Carolyn Swayze, Hard Choices, The Life of Tom Berger (1987)); see generally Joseph G. Jorgensen et al., Social Indicators in Native Village Alaska, 44 Hum. Organization 2 (1985); Richard W. Stoffle & Michael J. Evans, Holistic Conservation and Cultural Triage: American Indian Perspectives on Cultural Resources, 49 Hum. Organization 91 (1990).

²¹¹ Bruce Jennings & Kenneth Prewitt, *The Humanities and the Social Sciences, Reconstructing a Public Philosophy, in Applying the Humanities 125, 127 (Daniel Callahan et al. eds., 1985).*