Finding Meaning in a Complex Environment Policy Dialogue:

Research into Worldviews in the Northern Forest Lands Council Dialogue, 1990-94

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ABOUT THE INSTITUTE

The Institute for Conflict Analysis and Resolution at George Mason University in Fairfax, Virginia has as its principal mission to advance the understanding and resolution of significant and persistent conflicts among individuals, communities, identity groups, and nations.

In the fulfillment of its mission, the Institute conducts a wide range of programs and outreach. Among these are its graduate programs offering the Doctoral and Master of Science in Conflict Analysis and Resolution, clinical consultancy services offered by individual members of the faculty, and public programs and education that include the annual Vernon M. and Minnie I. Lynch Lecture Series.

The Institute's major research interests include the study of conflict and its resolution, the exploration and analysis of conditions attracting parties in conflict to the negotiating table, the role of third parties in dispute resolution, and the application of conflict resolution methodologies in local, national, and international settings. The Institute's Applied Practice and Theory Program (APT) develops teams of faculty, students, and allied practitioners to analyze and address topics such as conflict in schools and other community institutions, crime and violence, and jurisdictional conflicts between local agencies of government.

Associated with the Institute are affiliate organizations including the Consortium on Peace Research, Education, and Development (COPRED), an international network of more than 300 colleges' and universities' peace studies programs; the National Conference on Peacemaking and Conflict Resolution (NCPCR), which conducts a biennial conference and maintains communication with conflict resolution professionals nationwide; and the Northern Virginia Mediation Service (NVMS), which provides conflict resolution and mediation services and training to schools, courts, and local agencies and practitioners in communities across Northern Virginia and the Washington metropolitan area.

FOREWORD

We take a great deal of pride at our Institute in our emphasis on conflict analysis. Student are pressed to explore the causes and conditions of conflict before intervening, realizing that more often than not it is necessary to consider more than what is initially presented as the cause(s). Few projects so nicely demonstrate that they have taken this challenge rigorously as the Northern Forest Project, described in this Working Paper.

The challenge in this project was that the student-faculty team believed that previous analyses of environmental policy dialogues had often underestimated the psychological depth and complexity of the views, positions and interests of the participants. These cognitive structures – called "worldviews" by some writers – seemed to act in unpredictable ways, confounding good faith efforts at conflict analysis and resolution. The research team suspected that incomplete understanding of worldviews led to inadequate processes and unsuccessful agreements.

To analyze the issues involved in an ongoing regional policy dialogue, the faculty-student team realized that they needed a new way to explore worldviews. Their problem was both practical and ethical. How could they detect and analyze mental structures that are largely unconscious, often incoherent, and rarely articulated directly? Further, if they could detect and analyze these cognitive structures, how could they use the information without either manipulating or frightening the participants? They developed and tested a new research tool, called metaphor interviewing, as a way of explicitly exploring the meaning and thinking behind statements. They experimented with virtual metaphor dialogues. They paved the way for actual metaphor dialogues conducted in other projects subsequent to this work.

The Northern Forest/Worldview working group made another contribution to ICAR. They were the first of the informal faculty-student teams. Today we have more than a dozen focusing on areas of specialized interest, and have become a prominent and important part of our institutional geography.

Some may wonder why ICAR waited so long to publish this working paper. The ideas presented in this paper were presented at four national conferences between 1997 and 1999, and were widely discussed via the internet. In part, the delay was related to an antique notion: the idea that we should wait until the research and development was completed before publishing a report. The authors have now convincingly demonstrated that they intend to continue this work for many years to come; indeed it may never be "finished." We therefore proudly present this working paper as a report on work in progress. Readers intrigued by the possibilities suggested here, should make contact with the authors to keep informed about the continuing developments.

Sandra Cheldelin Director Institute for Conflict Analysis and Resolution "... many conflicts occur not because of competing interests but because the parties do not share the same conceptualization of the situation. This may occur because of divergent ideologies, values or cognitive structures."

INTRODUCTION

Among the different types of social conflict that have been studied by social scientists, disputes over the environment have been recognized as uniquely rich avenues for intellectual inquiry. Often occurring at the intersection of complex economic, social, legal, political, and ecological issues, environmental conflicts also evoke deeply held values that lie at the core of many individual and group identities. The nature of community, the definition of the good life, and the meaning of the relationship between humans and nature are only a few of the prominent questions commonly raised by these disputes. These deeply rooted philosophical issues are not easy to address under any circumstances. Since they clearly do not lend themselves to technical analysis or easy resolution, policy managers may not even acknowledge them, much less welcome their inclusion in public dialogue. Embedded in intense, high stakes policy conflicts, they are easily lost altogether.

Conflict management and resolution practitioners respond to complex situations by using "conceptual road maps" or "conflict maps" that identify the sources of the conflict and "indicate procedures to manage or resolve the dispute." Moore reflects well the diverse field of conflict management and resolution when he identifies five broad categories of conflicts – relationship conflicts, data conflicts, interest conflicts, structural conflicts, and value conflicts. These are not discrete categories and complex social conflicts usually include all five sources. Of the five types of conflict identified by Moore, the most problematic for conflict resolution and management practitioners are "value conflicts." Most practitioners consider values conflicts "unresolvable" and try to avoid or work around them.

We, the authors of this paper, concur that so-called "values conflicts" are among the most challenging for conflict resolution practitioners. We also concur that deeply held values are frequently aroused in disputes over the environment. However, we hypothesize that the category of "values conflicts" may be both incompletely articulated and inadequate for describing the full range of problems encountered during complex environmental conflicts. Moore, like many in the field of conflict analysis and resolution, appears to conflate related but not wholly identical conflicts under the heading values conflicts. He includes the following problems under the general heading of values conflicts: conflicts that occur because the parties have "different criteria for evaluating ideas or behavior," conflicts over "exclusive intrinsically valuable goals," and, conflicts over "different ways of life, ideology, or religion." We have followed Nudler and Clark in using the term "worldview conflict" to describe conflicts that may include competing ontological commitments and divergent epistemological preferences as well as conflicting values. We hypothesize that resolution of large-scale environmental and land-use conflicts is impeded by profound and largely unrecognized conflicts of worldviews.

As the opening quotation indicates, we believe that environmental conflicts often expose differences in how participants in these disputes socially construct their individual and group realities – their worldviews. What is an ecosystem? How should value differences within a community be dealt with? What are the rights of the natural world? These are not questions with objective, scientific answers, although science often plays a role in their discussion. Emphasizing the technical nature of environmental conflicts and attempting to reconcile competing policy positions of the stakeholders risks masking deeper differences in how they construct the meaning of community, environment, and their own identity. Failure on the part of conflict participants and conflict resolvers to examine these worldview differences may doom even the most carefully crafted agreement or policy.

This paper summarizes the results of a study by our research team made up of faculty members and students from the Institute for Conflict Analysis and Resolution (ICAR) at George Mason University, covering three public dialogues (collectively called the Northern Forest Dialogues) that took place between 1988 and 1994 over the future of the Northern Forest of New England in four northeastern states – Maine, New Hampshire, New York, and Vermont. All three processes were linked to a specific mandate: "to look closely at changes in the Northern Forest, assess the impacts of change on the region and its people, and lay out possible ways to maintain the Northern Forest and the traditional uses and quality of life dependent on the forest." 10

We focused primarily on the last of these dialogues, conducted by the Northern Forest Lands Council (NFLC) between 1991 and 1995. We studied media accounts, read official reports and collected transcripts of hearings, analyzed these documents, identified 26 participants in these policy dialogues to interview, analyzed those conversations, and then talked further with sources in and out of the region. While a single case study cannot pretend to yield sweeping conclusions, we feel strongly that our preliminary results raise significant questions about how complex environmental conflicts are analyzed and resolved. The purpose of this chapter is to provide the reader with an understanding of our research team's theoretical exploration of worldview conflicts, the method developed to test and apply our theory, and finally practical suggestions for how the results of this study can improve the way public disputes are managed.

Theory: Exploring New Territory: Defining Worldview Theory

To explain what led our research group down the various theoretical paths we followed, we begin our story by explaining the problems we observed with current theoretical models and practical guides to conflict resolution. While the high sport of academia is talking endlessly about the intellectual shortcomings of others, we will limit the discussion of our concerns to three main factors that motivated our group at its inception in 1994.

First, we felt that the dominant theoretical models used to explain the origins of social conflict overemphasized the role of deterministic, biological factors. Or, put negatively, we felt the dominant theories of conflict neglected the role of socially constructed systems of meaning, such as culture, as explanations for human behavior. We speculated that a better understanding

of the processes used to construct meaning by individuals and groups would lead to more effective ways of analyzing and managing conflict.

The second factor was growing curiosity about integrating what we came to call worldview theory into conflict resolution theory and practice. The Argentine philosopher, Dr. Oscar Nudler, 11 challenged us to consider new ways of understanding large-scale persistent conflicts. He proposed that worldviews influence social conflict far more than generally recognized. Nudler also indicated that metaphor¹² could be a useful tool for exploring the usually hidden assumptions and connections that make up socially constructed worlds. We were also intrigued by Nudler's suggestion that "metaphor dialogues" facilitated by conflict resolvers might be a way to help people with very different worldviews begin to understand each other. It was this conjunction of theory and practice that helped coalesce our team's general feeling of unease about current theoretical models of conflict resolution into a concrete research agenda. Third, many team members had direct experience with conflict resolution processes which were responsibly designed and managed - according to generally accepted standards and principles of conflict resolution practice - yet yielded few implemented results. Inclusive decision-making processes used by the field of conflict resolution in large-scale, multi-stakeholder public disputes are already criticized as inefficient (dialogues may go on a long time and the consenses which emerge may be hard to sell to those who were not involved). If they prove ineffective as well, there will be little use of them in the future.

We noted that many environmental "problem-solving processes" seemed to rely heavily on a single technique in which conflicting parties are urged to use "scientific knowledge" as common ground which then defines and shapes common solutions. As our understanding of worldview theory grew, the metaphors of our own field – FINDING COMMON GROUND or CREATING A SHARED LANGUAGE – seemed less and less adequate for dealing with fundamental disagreements over deeply held socially constructed meaning systems. When we explored these dilemmas of theory and practice, we found similar debates in other fields, each with its own unique language and history. Not surprisingly, we discovered that scholars from the fields of linguistics, philosophy, psychology, anthropology, and others all address the question of how people construct mental models of the world, and how those models give meaning to social interactions. The challenge for our team at this point was braiding and fusing these often eclectic strands of thought into a useful model. As a result, worldview theory, like conflict resolution itself, draws upon many disciplines.

We need to acknowledge at the outset that our account of what a worldview actually looks like and how it works is at best a picture of a picture. The following categories and descriptions are but one way of naming our subject matter, and are meant as starting points for dialogue rather than definitive answers. With that said, we hypothesize that a worldview contains five interrelated elements that form its basic structure:

- Ontologies: Statements about what we think we know about the world;
- Epistemologies: Statements about how we know what we know about the world;
- Axiologies: Statements about how these elements are ordered;
- Ethics: Statements about how one should act; and

• Internal logics: Statements that structure relationship and connections among the four preceding elements.

It is important to note that in classical philosophy, ethics are considered an element of, or are derived from, axiologies. In our own discussions, we often found it difficult to unravel all five elements listed above within any given narrative, since they were often deeply intertwined. Inevitably, ethical statements are inherently axiological because they make claims about the relative superiority or desirability of a given set of beliefs or actions in comparison to other beliefs or actions. For our purposes, axiology is used to refer to the ways that worldviews "nest" or order narratives and metaphors with respect to each other, while the element of internal logic refers to the reasoning within a given narrative or metaphor about ethical claims, relationships, and other ontological and epistemological statements.

Statements frequently integrate more than one of these worldview elements. For example, a person may argue that "rational scientific ways of understanding nature are inferior to more intuitive, spiritual understandings of the environment." In one statement, the speaker has revealed ontological assumptions (nature exists), epistemological assumptions (intuitive, spiritual insights are "real" knowledge), and axiological beliefs (spiritual knowledge is better than scientific knowledge). It is also important to stress that worldviews are plural in nature. Within each individual and society, there are multiple conceptualizations of these five elements that coalesce around core beliefs and concepts. For example, a person may have different worldviews drawn from their religious beliefs, political ideology, social class, gender, and ethnicity, to name only a few factors. These different worldviews are all intertwined, sometimes consciously, other times in mutual ignorance, and more often than we would like to believe, in conflict.

This brings us to another important point. As our group began to piece together the discourses of various disciplines, we found ourselves struggling for a unifying map, or story, that could help us make sense of these often divergent accounts of cognition, culture, and human relationships. Prompted by our early focus on the role of metaphors in processes of meaning creation, we began to draw heavily on the world of literature and narrative. In written stories, plays, and film, character and plot are commonly advanced through alliances and conflicts among characters, all organized around a central, unifying plot. Likewise, worldviews seem to share similar dynamics, with their own internal "characters" constantly in dialogue, usually organized by a "plot" that provides an organizing context for the "action."

As suggested by Nudler, metaphors can provide "windows" that illustrate different aspects of worldviews. For instance, common American metaphors about marriage draw on language of contracts and economic arrangements, which some would interpret as revelatory of deeper cultural worldviews about gender. Because these types of metaphors are often "unmarked" or unconscious, they reveal what people take for granted about how the world works, or more important, how it should work. We theorized that we could gain indirect access to worldviews by analyzing the metaphors used in everyday language. This theory is built on the assumption that metaphors function as mental templates, helping people to structure and give meaning to their interaction with the world. By revealing these cognitive structures, metaphors

may help us predict how individuals and groups in conflict will construct operative relationships, values and actions.

As our group explored the dynamics of metaphors more deeply, we found that they were in turn embedded in more elaborate narratives that created organizing structures for the elements of worldviews previously discussed. Narratives create the social context that explains what actions, relationships, and beliefs "make sense" according to their "plots." This generally involves playing out the "internal logic" of the metaphors. Using the example of MARRIAGE AS A CONTRACT, the larger narrative that unfolds is an account of human relationships that adhere to the logic mapped out by the "storyline," from the actual ceremony itself to questions of "ownership" concerning property and children, "contractual obligations" of each spouse, and other similar concepts most readers can probably supply for themselves.

A final dynamic that we highlight is the tendency for people to literalize their metaphoric language and narrative accounts of the world. Stories about marriage, the family, the environment and a myriad of other social objects and events are internalized and unconscious. People often forget that they are constructions that describe only one way of many for seeing and understanding the world. In the previous sentence, many readers probably took for granted the use of the common "ocular" ("seeing") metaphor that could be stated as KNOWLEDGE IS CLEAR VISION. Furthermore, these literalized metaphors and narratives often take on canonical status. In other words, they are not simply descriptions of how the world is, but how it should be.

To summarize, worldview is the term we use to capture or express the deep cognitive structures that comprise socially constructed models of reality - of the world. In the process of socially constructing our reality, not only have we created our world, but we also have constructed a place for ourselves in it – that is, our identity. Thus, worldviews give meaning to our interactions with the world and provide the largely unconscious and unarticulated foundation for acting in the world. Because worldviews are usually not explicit but rather unconscious, we only can have indirect access to them by analyzing their manifestations. One particular manifestation is metaphor. Metaphors both express and reveal worldviews and thus are a tool for understanding the ways people structure, make sense of, and give meaning to the world. This understanding of worldviews led us to develop a new model for understanding social conflict. If the parties involved share similar worldviews, they can draw on roughly similar "cognitive maps." Here, one might think of a group of scientists who all agree on fundamental, underlying rules of scientific inquiry but argue over the accuracy or interpretation of data. If there is some overlap in worldview, but also some difference, a more complex situation is produced. Identity conflicts are one common example, where a mix of gender, class, cultural and other factors create a patchwork of convergent and divergent narratives. Finally, there are conflicts where the individuals or groups share little commonality in their worldviews, as can be the case in conflicts between different cultures.

In multicultural societies, conflicts of the second and perhaps third type seem to be occurring with greater frequency. Yet, most classical conflict theory, particularly negotiation theory, was developed primarily with the first kind of conflict in mind. As a result, much of the practice of conflict resolution revolves around either finding or creating "common ground." This

strategy is often informed by the belief that all people and cultures either share common biological needs or subscribe to a rationality that transcends culture or other local factors. However, techniques and theories based upon these assumptions are inadequate in situations where worldviews overlap only partially or not at all. The question is not so much how to teach different groups to sing in harmony, but how get them to appreciate other melodies that may initially sound discordant.

Who Speaks for the Trees: Understanding the Language of Forestry

Given the worldview theory articulated above, we raised two sets of questions. In terms of how conflicts are analyzed, our group wondered what would happen to our understanding of conflict and conflict resolution if we stopped thinking of people as "holders of interests or positions or values"¹³ who need to reach agreements with one another through a "bargaining" process. What factors would we "see," if we thought of conflicting parties as makers of mental maps, ¹⁴ tellers of tales, ¹⁵ creators and users of schema, ¹⁶ and constructors of frames?¹⁷

On a more practical level, we wondered what happens to parties involved in environmental conflict resolution whose worldviews or mental models do not coincide with the dominant technical framing of environmental problems? Do they come "to the table?" If they participate, are they heard? Can some breakdowns in environmental conflict resolution processes be traced to a failure to address adequately the cognitive differences among the parties?

After over a year of almost weekly theoretical debates and discussion about worldview theory, our research group began looking for "real world" situation on which to test our hypotheses. At the time, a series of very vocal public debates over forestry issues in the West and Northeast of the United States provided fertile ground for our investigations. These conflicts involved a range of stakeholder groups that included deep ecologists, private industry, professional forestry organizations, government, diverse citizens' groups, and many others. Reading a variety of journalistic and professional sources related to forestry, we found several recurrent metaphors that suggested a number of different underlying worldviews. A powerful metaphor that has had significant impact on contemporary forest management conflicts is FOREST IS A FARM. This metaphor was introduced in the United States by Gifford Pinchot at the end of the 19th century, who offered it as an alternative to earlier metaphors such as FOREST IS A MINE and FOREST IS A WILDERNESS.¹⁸

Each of these metaphors was, in its time, validated by a community of people who worked in and with the forest, and each metaphor shaped a different set of practices and roles in relation to the forest. The FOREST IS A FARM metaphor also provides a fascinating illustration of how the internal logic of a broader narrative is played out. In this case, the mental map of the world of farming is "imported" into the world of forestry and expanded into a coherent narrative. Economically undesirable species become "weed trees" and "pests." Trees are "harvested" with the goal of maximizing "yields."

Each metaphor for the forest, during its period of dominance, became reality. Instead of seeing each metaphor as one possible way to explain objects and relationships, those who accepted a metaphor believed that the stories related to that metaphor described the real world. These stories, in turn, prescribed certain roles, and those roles encouraged actions consistent with the "characters." To those who believed the story, the roles seemed natural and inevitable products of the "way the world works."

We also discovered that while the use of different metaphors can result in conflict, it is possible for people who use the same metaphor to be in conflict with one another. The FOREST IS A FARM metaphor may direct attention to certain elements of the forest (such as trees) and obscure other elements (wildlife, for example) that might be considered a central part of the forest by someone using an alternative metaphor. However, the FOREST IS A FARM metaphor can also be enacted in contradictory ways. Thinking of a farm as a nineteenth-century family farm or a contemporary organic farm, one would not enact the FOREST IS A FARM metaphor in the same way as someone thinking of a farm as a large agribusiness operation. The two forest-farmers would be in conflict over basic definitions of reality and relationships, a worldview conflict within what appears to be a single metaphor! The two forest-farmers might even be the same person at two different times.

At this point in our theoretical investigations, we came to two broad conclusions that informed our subsequent research. First, conflict intervenors would benefit from better understanding their own worldviews. From an analytic-practitioner perspective, we found that all conflict theories we examined were based upon consciously and unconsciously constructed narratives. However, since these assumptions are made implicitly by those who articulate or develop theories, the underlying assumptions are almost always absent or implicit in the written expositions of theory. This applies no less to theories in the physical sciences than it does to social science theories. For example, the ATOMS ARE BILLIARD BALLS metaphor is an unspoken construction of reality in the hard sciences. Rigorous analysis and exposition may reveal the assumptions in the physical sciences. But comparably rigorous techniques are rare in social science and even more unusual in the midst of an intense conflict. A conflict analyst's or practitioner's lack of awareness about his or her own worldview might become a formidable barrier to understanding and dealing with conflicts in which worldview differences occur. Blinded, a practitioner might believe that techniques or theories, which are well grounded in one culture or setting, are more universally applicable than is warranted. Application in another ethnic, religious, or environmental conflict might prove not merely foolish, but tragic.

Second, people and groups in conflict would benefit from exploring their own and other's worldviews. A key element of this process is helping people recognize their own metaphors and narratives, and understand how they have actively (if unconsciously) structured their worldviews. As people come to see that their assumptions and beliefs are only one of many ways to bring value and meaning to the world, the hope is that they will become more open to the worldviews of others. Again, the goal of this process would not be the creation of a singular worldview (although that is one potential outcome), but creating a narrative account within each party's worldview that lets them work constructively with the values and beliefs of others.

The next challenge our research group faced was the task of developing a research methodology that addressed the dual questions of how to understand the structure of another's worldview, and what happened when different worldviews came into dialogue?

Research: Building Consensus on Forest Management: The Story of The Northern Forest Lands Council Dialogue

Continuing our exploration of forestry conflicts, the research group investigated a number of ongoing disputes as possible case studies. Eventually, we settled on the Northern Forest Lands Council (NFLC) process that had concluded only a few months previously, in late 1994. The case had several factors to recommend it to our group. The four New England states involved were geographically accessible to us. The NFLC process included diverse parties and issues and the process employed several different types of decision-making processes. The public "listening sessions" held in all four states were well documented. The NFLC produced two reports integrating the results of the decision-making process. Finally, there were numerous secondary sources in newspapers and the press of all four states.

At first, we asked ordinary investigative questions: Who? What? When? Where? How? We then gathered information any journalist or researcher might examine to give us a background and context for our research. What we found were narratives and metaphors hidden within these otherwise innocuous accounts. We therefore retell this story to illustrate the value of going beyond the initial questions.

The NFLC was the centerpiece and by far the most comprehensive in scale and scope of a series of dialogues held between 1988 and 1994 regarding the future and use of the Northern Forest. Covering more than 26 million acres in four states of Maine, New Hampshire, Vermont, and New York, the Northern Forest has historically played a central role in the economy and culture of New England. Unlike the old growth forests of the Pacific Northwest, more than 80 percent of the Northern Forest is privately owned, a tradition that reflects a regional culture based on shared stewardship, the community, and local autonomy. In addition, the economies of forest communities throughout New England and upstate New York are tightly woven into the fabric of the landscape, based on wood products, logging, tourism, and recreation. According to the NFLC, many people believe that the harbinger of regional change and the precipitating event behind the formation of a regional effort to address forest-related issues occurred in 1988 when the Diamond International Corporation, a large forest holding and forest product manufacturing corporation, put up for sale a million acres of land in four states. This move generated great public concern, because unlike previous sales where wood products companies sold or exchanged lands, nearly 200,000 acres of land in Vermont, New Hampshire, and New York were bought by developers for recreational and residential uses. The risk of major change in the region was perceived in diverse circles, and political pressure began to build to do something about the situation.

Prompted by Vermont's Senator Patrick Leahy and New Hampshire's then-Senator Warren Rudman, Congress responded to public concern and pressure in 1988 by establishing the Northern Forest Lands Study (hereafter the Study), to be accomplished by the Forest Service of

the U.S. Department of Agriculture. The Study was accompanied by the Governors' Task Force on Northern Forest Lands (Governors' Task Force), whose members were appointed by the Governors of the four states. This four-state, twelve-member body was made up of representatives from state agencies, forestland owners, and environmental organizations that provided input and oversaw the Study. Congress asked the Forest Service, with the Governors' Task Force, to assess the potential impacts of changes in the Northern Forest and to come up with a series of potential strategies – not recommendations – for dealing with threats to the Northern Forest. Senators Leahy and Rudman further articulated the purpose of the study in 1988 when they wrote to the chief of the Forest Service, "The current land ownership and management patterns have served the people and the forests of the region well. We are seeking reinforcement rather than replacement of the patterns of ownership and uses that have characterized these lands for decades." ¹⁹

After a year and a half of gathering information and hearing the views of various interested groups on forest-related issues, the Forest Study was completed in May 1990. Drawing on the work of the Forest Study, the Governors' Task Force published its own report at the same time and advised the creation of a four-state advisory body to continue the investigatory process "because many of the recommendations needed more work before they would be ready for consideration as changes to public policy affecting these lands."²⁰ Thus, the NFLC was created later in 1990 and scheduled to work through 1994. The NFLC itself was made up of one representative from the Forest Service, and four Governors' appointees from each state representing the three constituencies (state agencies, forest landowners, and environmental organizations) with the addition of a local community representative from each state. This seventeen-member council sought advice on biological, economic, and financial matters. Citizen Advisory Committees were created in each state, expert panels were assembled, and a comprehensive resource inventory compiled. Public meetings and hearings were regularly held in all four states, with an initial draft report of the NFLC submitted to the public for review through "listening sessions" where Council appointees could hear community comments on the report.

The recommendations that emerged out of this process in the Fall of 1994 addressed the economic and social forces perceived to be behind the region's changes and promoted three interlocking objectives: "strengthening the forest economy, fostering long-term stewardship of private land, and allowing for public acquisition of land with exceptional public values, where those values are threatened now or in the future, and enhancing management of public land."²¹

As the title of the report, Finding Common Ground: Conserving the Northern Forest, suggests, the NFLC made a conscious effort to integrate the range of values, attitudes, and specific policies advocated by parties involved in the process. Its work completed, the NFLC disbanded shortly after the release of its final report. In 1995, the recommendations passed from the regional forum to the four states for implementation. Successor forums were to be established in each state that would draft suggestions for legislative and executive action. We thought it would be particularly interesting to observe how the NFLC sought out multiple perspectives on the issues, dealt with the inevitable differences and conflicts that would emerge during this process, and finally wove together a series of consensus-based recommendations for action that reflected the positions and interests of diverse stakeholders.

There is nothing wrong with this narrative. It identifies parties, issues, processes and outcomes in just the way typical conflict resolution literature teaches. The only problem is that this version of history tells us very little about the complex web of meanings constructed about the forest, economy, and region by those who participated in the process or those who did not. Reading this, we cannot assess the depth of commitment to the recommendations as a whole, much less to any individual proposal. We cannot foresee where implementation of the recommendations might stumble.

The Means of Interrogation: Understanding Metaphors and Narratives

We used two types of data. There were the documents prepared and distributed by the NFLC itself. These included the preliminary and final reports, *Finding Common Ground:* Conserving the Northern Forest. Both of these documents were efforts to synthesize the views and interests of the many participants in order to make policy recommendations. There were also transcripts of the "listening sessions" held around the region from the Fall of 1993 through Spring of 1994 to get public input on preliminary recommendations. At these sessions, interested individuals could speak for three minutes about the recommendations or other forest-related or council-related issues. Official NFLC documents and the listening session transcripts provided ample text for metaphor analysis. But we still needed to answer the question, "How does one do metaphor analysis?"

Metaphors map one set of concepts (for example, farming) onto another domain (for example, the forest). To understand how the metaphors used in the NFLC process were mapping one set of concepts onto another domain, we initially used a methodical approach, recording each metaphor and its components on a form.²² These components included the words used and the linkages stated or implied, along with notes about the other metaphors or concepts in the same "family" or cluster. In short, we attempted to understand the relationships at work inside the metaphor. Specifically, we wanted to understand which aspects were being transferred from one part of the metaphor to another.

As we tried to use our recording form, we soon realized that there were an overwhelming number of metaphors used in the NFLC documents. We identified dozens of metaphors in single pages of text. Determining which metaphors were being used merely as figures of speech and which were perhaps "cognitive windows" proved to be extremely difficult. Another problem was that the metaphors did not always conform to the analytical or taxonomic devices that we had set up; the same metaphor could be used in a variety of ways and interpreted as having multiple meanings. Trying to unpack every metaphor we met not only exhausted us but made us feel we were missing the forest for the trees, to abuse an old metaphor.

The use of the metaphor recording form and rigorous metaphor analysis were not successful in the manner intended. However, reading through the listening session transcripts and the NFLC documents with the metaphor recording form close at hand did provide us with a gestalt impression or vague outline of some of the different worldview elements expressed in the listening sessions and the NFLC reports. Through this process we also developed a general

understanding of the issues and parties involved, the different narratives the participants used to describe the issues, themselves, and one another, and an ambiguous sense of how these different views had been synthesized in the joint documents produced the NFLC. (See Appendix A for a brief listing of major forest-related themes we found in the NFLC documents.)

With respect to this last point, we noticed that the NFLC report used some powerful framing narratives and metaphors to describe both the problems besetting the region, the reasons for the current conflict, and the visions that would enable inhabitants of the region to maintain their interests and identities and coexist with a minimum of strife. For example, one of the NFLC's narratives concerns the region's history, traditions, and people. This narrative portrays Northern Forest residents as having "a connection to the land fewer and fewer Americans experience or understand, having grown up hunting, fishing, trapping, and walking in the woods here."

This narrative also describes the importance of the mills to the region's economy, and the benefits of private ownership to both environmental and economic health. Furthermore, it describes Northern Forest residents as hardy frontiersman: "Living in the Northern Forest has often been difficult, but its people are proud of their endurance, their heritage, and a way of life so different than in the urban areas around them."²⁴

We gradually selected five metaphors used by the NFLC that we wanted to use as vehicles to test our theories:

- 1) The NFLC process as a search for "common ground";
- 2) "Complex social and economic *forces*" for change that were placing "*pressure*" on the Northern Forest;
- 3) The Northern Forest as a "complex and dynamic interrelationship of people, communities, land, water, plants, and animals";²⁶
- 4) The future of the Northern Forest as "a landscape of *interlocking parts and pieces*, inseparable, reinforcing each other," ²⁷ and
- 5) The importance of good stewardship to a "healthy forest and a healthy economy."

Metaphor Interviewing

The next step was to conduct interviews with a sample of the process participants. We chose twenty-six people who:

- 1) Used metaphoric, narratively complex, or image-laden language in listening session testimonies;
- 2) Represented various viewpoints (e.g., self-described environmentalists, preservationists, outdoor recreational enthusiasts, loggers, timber industry employees and representatives, community leaders and activists, small landowners, etc.);
- 3) Represented the four states; and, of course,

4) Were willing to spend approximately 90 minutes speaking with us and were available during our field visits.

After making contact and setting up interview times, we were ready to go. We used an elicitive interview process that was designed to get behind some of the terms the respondents used in the NFLC listening session transcripts, as well as metaphors used by the NFLC in its *Finding Common Ground* report. (See the interview protocol at Appendix B.)

We divided the interview into three sections. The first part was intended to get comments about the NFLC process, how they participated, and what they liked about it, what suggestions they had for improvement, what they hoped to see come out of it, and what actions they were involved in at that time of the interview regarding state-level policy formulation or implementation efforts.

In the second part of the interview, we invited the interviewees to expand upon their own metaphors from the listening sessions and to respond to metaphors we had selected from the testimony of other participants. We pulled out metaphors or phrases that might have multiple meanings and fed these back to the interviewees somewhat out of context and removed in time (since each had made his or her testimony some eighteen months before we conducted the interviews). We then invited the interviewees to reflect on what they had said; to unpack it so we could get a better sense of what they meant and the connections between the various pieces. For each interviewee, we also selected a metaphor from someone else's testimony that we thought was complementary to their own metaphors and one that we thought was contrary to their own metaphors. We asked each person we interviewed to explain or expand upon the metaphors that were used by others.

As an example of having an interviewee unpack his or her own metaphor, one person we interviewed had said at one of the NFLC's listening sessions that "the greatest gift we can leave our kids and grandkids is the gift of UNDOMESTICATED WILDERNESS AREAS." The term "undomesticated wilderness areas" seemed redundant to us, so the interviewer asked him to elaborate on what he meant by the term. He went on to explain that the term wilderness means different things to different people. To him, wilderness "really means roadless, no extraction, uses are all minimal uses that are designed to create a sense of untouchedness, as opposed to what many people think is wilderness. They think of wilderness as anything where you don't see buildings around." To him wilderness has a spiritual quality, because it takes you out of what he calls the "fault world," where "almost everything you do or don't do is governed by a set of rules about fault." He said that it is "very freeing to be out of the fault system and into the no-fault system. There is something about wilderness that does that, that says if I'm careless with my food and the bear eats my food, it's my fault. If I trip over a log, or slip on a rock, or fall into a stream, it's my own fault. And instead of that being an onerous burden to carry, it's a very freeing thing to realize that you're in the presence of something larger than yourself, that you didn't create, you didn't manage." So, by asking someone to unpack a three-word phrase, we elicited a richly detailed story about the basic qualities of wilderness and its spiritual essence. In the last part of the interview, we wanted people to reflect on some of the many metaphors used in the NFLC final report. We wanted to know whether the common metaphors that dominated the findings in the report were shared or whether they were in some ways a mask for

continuing conflicts that would get in the way of implementing the recommendations. Although the final report was filled with metaphorical language, we selected the following metaphors for our interviews: finding common ground; change is a force; the Northern Forest is made up of interlocking parts and pieces; stewardship; and two metaphors that were connected in the report – healthy forest and healthy economy.

By the time we got to the actual fieldwork, we were operating from two somewhat contrasting assumptions. On the one hand, we saw metaphor as a condensed form of thought reflective of individual mental maps or underlying beliefs. This assumption guided the second section of our interview where we asked people to unpack their own metaphorical language. The other research question that came out of our reading of the NFLC transcripts and the final report related to collective versus individual metaphorical language. Does collectively generated metaphorical language potentially mask or conceal differences in understanding or meaning? In the case of the NFLC, when a set of recommendations was established using metaphorical language - such as common ground, stewardship, or the idea that the forest is a landscape of interlocking parts and pieces – did people share the same understanding of that agreed upon metaphorical language? If not, what are some of the implications as states try to write and enact policy based on those recommendations? The last section of our interview process, where people commented on the metaphors present in the NFLC report, attempted to address these questions. If we were guided by one big question, it concerned how different meanings can be negotiated, and the promise and pitfalls of metaphor as a tool for negotiating meaning. When the fieldwork was completed, we then had to develop a method to interact with the interview texts. Because we could not afford to transcribe all the interviews, we selected representative interviews to be transcribed. This selection process was based on our feel for how well the interview went, how articulate the interviewee was, and on the richness of the metaphors used, the ability of the interviewee to unpack his or her metaphors, and the complexity of the resulting narratives.

We then read through the interview transcripts with the intent to perform some kind of metaphor analysis on the documents. As each of us did so independently, we were struck by the narrative character of the interviews. We realized that the questions that we asked of the interviewees – questions that were rooted in the interviewees' own metaphoric language and imagery elicited numerous stories. However, these narratives were not told intact, but were scattered throughout the interview. That is, they were told in bits and pieces throughout the course of the interview. We used colored index cards to identify specific stories and then we grouped each set of cards to obtain a relatively coherent story. We identified the bits and pieces of each story and cut and pasted them into one document. We found that interviewees told different types of stories. There were histories of the current situation, stories that described the current situation, visionary tales that described the goal of a healthy forest, action narratives that explained the steps that should be taken to move from the present state toward the goal of the healthy forest, autobiographical stories about the interviewees' own life and development, and epistemological stories about how people "know" the world.

Some narrative cues or indicators captured our attention because they seemed particularly revelatory of the interviewees' worldviews. These cues took several forms. One form was when the interviewee made explicit linkages between events and meaning or value. Many

people told specific stories to illustrate why they felt or believed as they did. These stories were sometimes mythic, sometimes convoluted, but always analogical or metaphorical. That is, the story was explicitly linked to the current issue through analogy. Some were stories of personal experiences while others were drawn from collective stories (such as history, science, or prophesy). Many of these stories revealed changes in expectations and suggested patterns of learning on the part of the narrator.

Shifts of voice also caught our attention. Some people explicitly said, "I say... but they say..." This format provided comparative language and revealed perceived differences, particularly perceived differences in expectations or sequencing. Also included in shifts of voice were conversations in which interviewees spoke of themselves at another time. In other words, they said something like: "I used to think... but now I see..."

A third worldview indicator consisted of categorizations and dichotomies.²⁸ These devices provided an even more explicit form of comparison. Often framed within discussions of standards of "rightness" and often linked with cycles of time, speakers explicitly explained how they attached meaning to events or actions.

Surprising answers and associations comprised the final narrative indicator of worldviews. Sometimes, the interviewer asked a question and got an answer having to do with an apparently different topic. Clearly, the interviewee thought the question and answer were related. We then tried to understand how and why the interviewee thought the question and answer were related and often had to look at other parts of the interview to explain the connection. We noted that "surprising" answers revealed as much about our own worldview as it revealed about the worldview of the interviewee.

In order to make sense of each interviewee's different stories and to think about them as a whole (a larger narrative), we tried diagramming their stories on large sheets of paper. Then we began comparing the stories of different subjects, looking for the ways in which people were extending the same metaphor into stories that were difficult to integrate with one another. In other words, the same metaphor served as the basis of multiple stories, some of which were narratively inconsistent with one another. This not only happened between the stories told by different individuals. It also applied to the stories told by a single individual. Concerning conflict resolution, we began to wonder what a practitioner could do in the face of stories that are not easy to integrate.

Analysis: Revisiting the Northern Forest Dialogue Story

Earlier in the chapter we gave a brief history of the Northern Forest Dialogues. While we are not taking issue with the official view of the initiation and evolution of the Northern Forest Dialogues, we explored the mental and social processes that were involved in constructing reality during the period of "problem definition" that led up to the creation of the Northern Forest Lands Study, the Governors' Task Force, and later the Northern Forest Lands Council. When we examined the NFLC, we asked: "How does a problem become a problem? How did a regional

dialogue about forest issues become the logical process for dealing with a host of economic, environmental and social problems that were plaguing the region?"

While many people we spoke with pointed to the sale of Diamond International lands as the watershed event that alerted people to a crisis facing the Northern Forest, it was not that simple. The Diamond International sale became the symbolic reference point for one of the problems facing the region – the parcelization of the Northern Forest for second home construction. There were other issues that became tied to the Northern Forest and wrapped up into both phases of the regional efforts to talk about "Northern Forest problems." People were worried about a variety of issues – job losses because of changes in the regional and global economies, the dependence of local communities on multinational corporations, the effects of clearcutting on water quality, whether lands should be privately or publicly held, and the general health of the regional ecosystem. How did an unformed feeling that, many things were wrong in the region change into the description that this was a forest problem that needed to be dealt with at a regional level?

People we interviewed realized that these vaguely understood problems had sources outside of the region, and even outside of the United States. So, they knew that any answers or solutions would need to be found at a level other than just the local or state level. On the other hand, they wanted to reassert their control over the problems and not just wait for someone else "out there" somewhere to solve their problems. This tension between reasserting local control and recognition that the problems were bigger than local problems had a lot to do with the construction of a regional problem and a regional process for dealing with that problem. The forest was seen as a regional feature or characteristic that crosses the very clear cultural, political, social and economic boundaries that separate these states.

However, when one defines forest issues as the problem, there are many ways of looking at the forest, and many issues that may or may not be included under the general description of forest issues. The NFLC decided to focus on a limited number of issues that might be viewed as part of the shared forest problem. At least initially, the NFLC was selective in identifying what were and were not "forest issues."

Because of different land ownership patterns, economies and political cultures, there was no immediate regional consensus about what constituted a "forest problem." People in Maine were much more concerned about job loss, because they had a higher percentage of jobs that were directly tied to the forest industry. Residents of New Hampshire, Vermont and to some extent New York were more concerned about parcelization due to development. This is not to say that no one in Maine was concerned about forest practices or development. Maine is home to some very powerful environmental groups, such as the Maine Audubon Society and the Natural Resources Council of Maine. They had been pushing for reforms in forest practices and development laws for a long time, and there were many conflicts in Maine over forest-related issues. Something had to override this kind of internal squabbling in order to get interest groups with contradictory agendas and states with different problems to agree to work together on a "regional" forest problem.

The metaphor of a BESIEGED REGION turned out to be particularly helpful in the process of framing this situation in a way that overcame many of these internal conflicts. Participants and local observers of the Northern Forest could relate to that metaphor on a cognitive and emotional level. They felt besieged, although they may still have disagreed as to the identity of the attackers who held them under siege. For some, the region was being attacked by corporate decision makers who were trading, selling, and deciding the fate of their region in board rooms and stock exchanges in New York and London. Others said the attackers were the hordes of tourists who invaded the Northern Forest every summer, assuming it was their rightful playground, and therefore pushing for preservation, even if it meant destroying timber-dependent communities. The important thing was that the siege metaphor allowed them to agree – in spite of their other differences – that they wanted to regain local control and preserve traditional ways of life. And, this agreement formulated itself into a metaphor of RESISTANCE TO ATTACK OR UNWANTED CHANGE that is repeated throughout the final report of the NFLC and was frequently echoed in the interviews.

When people from the region went to the federal government to fund the original Northern Forest Lands Study and, later, the NFLC, it was with some apprehension on the part of many landowners. New England has a history of independence from federal intervention and a proud tradition of self-help approaches to problem solving. The metaphorical conceptualization of the problems as related to a siege, and this tradition of independence combined to create a conceptual groundwork for political action at a regional level that was funded by the federal government but very much controlled by the four states. The money for the initial Northern Forest Lands Study came from Congress, and the study itself was done under the direction of a Forest Service employee and two assistants. But, the Governors' Task Force, appointed by the four governors, acted as "Board of Directors" for the Northern Forest Lands Study. Federal money was brought in to run the process, but the process was clearly supervised by a regional entity so that control of the results would remain at the regional level. Furthermore, the Northern Forest Lands Study mandate was to gather information and offer potential strategies for addressing forest problems. It had no authority to act or to assess forest management practices. The goal was to reinforce rather than replace traditional uses of the land.

Although dialogue participants bought into the BESIEGED REGION metaphor and the identification of the locus of regional problems as "forest-related," people prioritized these problems differently, and some well-organized groups did not want to discuss certain issues at all. For example, the large industrial landowners in Maine did not want to discuss forest management practices such as clearcutting even though environmental groups saw this as a major factor in ecosystem deterioration in the region. Many of the environmentalists we interviewed were dissatisfied with the framing of the forest-problem as primarily one of land conversion. They thought that particular framing of the problem was not necessarily wrong, but that it was only a partial representation of what was ailing the region. They were upset that there was little or no mention of the threat to healthy forests from clearcutting, forest fragmentation from road-building, and that such qualitative issues as whether a tree farm is the same as a forest were not addressed during the NFLC process.

One person we interviewed in Maine mentioned that when the NFLC process first started, in the course of trying to get everybody to the table, the timber products industry refused to

participate if issues such as forest practices, land protection, or biodiversity were on the agenda. They were willing to talk about taxation or regulatory issues – their business concerns. He likened it to "doing a major study on teenage pregnancy, but not talking about sex, or a comprehensive study on cancer, but cigarette smoking is off limits." He saw it as an "undemocratic refusal to put everything on the table" at the outset. However, by the time the NFLC finished its work, these concerns were no longer off the agenda. Examining forest practices was not part of the NFLC mandate. However, forest practices were pushed onto the agenda as a result of public interest and insistence and, to their credit, the organizers of the NFLC responded to that public concern. So, forest practices were addressed and discussed to some extent in the NFLC process and reflected in the recommendations.

When the Northern Forest Lands Study was completed in 1990, the Governors' Task Force recommended creating an ongoing regional council to address issues and problems related to the Northern Forest. Some people envisioned this as a council that would actually have some power to act. Others resisted this removal of power from the state to the regional level. What they ended up with was the NFLC, which was created to continue the study and advisory roles of the earlier Northern Forest Lands Study. However, the NFLC organizers expanded the concept of "study" to include information gathering through dialogue. Unlike the Northern Forest Lands Study, which was based solely on a model of technical learning, the NFLC adopted a model that included social as well as technical learning. They also expanded the groups of people who came into the process by creating Citizen Advisory Committees that included small landowners and community representatives and not just the industry representatives who had been involved in the earlier study.

To summarize, the first round of dialogues, the Northern Forest Lands Study, took a very classic approach to dealing with public policy disputes. It involved a process of scientific inquiry where you could divide up the facts and values. The Study assumed that if you could place the parties on one side of the table, and the problem, scientifically defined as how to manage the forest system and integrate it into a sustainable economy, on the other side of the table, the parties could then use this base of objective knowledge to articulate a shared voice. One person we interviewed argued that the NFLC came about because the environmental interest groups did not get what they wanted out of the original Northern Forest Lands Study process. In his view, the environmentalists were unhappy with the results of good science, so they were politicizing the problem. Based on our interviews, we would argue that the NFLC process was not a consequence of people using politics to undermine "clear cut" scientific knowledge. Rather, after the completion of The Study, people discovered that the scientific knowledge base was not so clear cut after all. Even if you could find objective scientific knowledge, the values assigned to it by the parties were wildly varying. This helps explain why the NFLC was much more focused on consensus building and dialogue between the different parties.

On Weaving Stories Together and the Multi-dimensional Nature of Identity

One of the more interesting aspects of the stories we were told had to do with the multidimensional nature of human identity and the human tendency to try to weave together different narratives. Several examples serve to illustrate this theme.

One person from Maine whom we interviewed said, "If we keep going the way we're going, we're going to HIT THE WALL." His metaphor brought to mind an image of the crash dummies in the auto safety commercials, so we followed up by asking, "Can you tell us what you mean when you say HIT THE WALL? Can you tell us what the wall is? How are we going to hit it? When will we hit it? Can we avoid it?" These questions, which were rooted in the interviewee's own metaphoric language and imagery, elicited numerous stories about the forest related to the path of its development, where it was going, how human beings were impacting it, and where it would all end if we continued with current policies.

His answers indicated a deep awareness of the natural processes of forest evolution. So, we asked him to react to the WORKING FOREST metaphor that was used in the final report and by many people who testified at the hearings. In this case, we got a very interesting answer. He did not outright reject the notion of a working forest. Rather, he transformed that metaphor by talking about the need to work with the forest rather than against the forest. So, clearly this person – although very able to articulate his own stories of natural forest processes – validated the need to extract resources and develop economies that support communities. He was able to, and clearly already had been, thinking about weaving different sets of stories together. This was, in part, because he was telling multiple stories. He was not a member of an interest group defined solely by a stakeholder identity. His identity was not unidimensional. If we take into account the complexity of the social-psychological processes that inform his stories and don't reduce them to simplified caricatures or unidimensional markers for sets of positions and interests, this person, like most others we interviewed, is very hard to categorize by interest group membership.

Another interviewee, a priest in upstate New York, talked about his notion of stewardship that involved reconnecting the people's spirituality to the natural world. As part of that process, he talked about the strong need he sensed in people to preserve both their way of life and the environment, and how he thought people were "squeezed" in the middle between extreme views held by both environmentalists and developers. To him, most of the people participating in the listening sessions were "looking for a way to live, not a side to join."

Someone we interviewed in Vermont, a self-described grassroots activist, expressed her frustration with large-scale public processes that confine a person to a particular box or category. Part of her frustration was due to the power of particular organizations to define the agenda for those they believe comprise their constituency. She saw this as happening on both "sides" of the Vermont follow-up to the Northern Forest dialogue – within environmental groups and also within forest products groups. She said that "we have to break down those barriers of feeling that you're not legitimate unless you really are attached to one organization or one philosophy." She indicated that her views could not be reduced so easily as to be represented by a single organization or perspective. In addition to her grassroots activist identity, she is also a housewife, an educator, and a member of a particular geographic community.

This same interviewee used her own metaphor to describe an ideal dialogue process. Her metaphor was making a tapestry – weaving together various pieces of information and stories. She believed that too many people seemed to be focused on particular forest issues, such as

water quality, forest sustainability, taxation, or rural economic development, and were not working to weave together the various parts. While she believed that various threads should be woven together, she did not find all threads to be of equal value, and some had little or no place in her vision of the tapestry. The tapestry she envisioned did not accommodate those who regard the forest only as a moneymaking resource. Yet, her vision of the tapestry recognized the historical, economic, ecological, and social context in which the forest is situated.

Despite the interest in and tendency to combine different narratives, weaving other stories into their own narrative was a difficulty facing the people we interviewed. Another difficulty they faced was trying to weave their own stories together in a coherent fashion. When interviewees extended their metaphors into stories, these were not seamless narratives. There were, in fact, internal contradictions and ambiguities. We believe these contradictions and ambiguities represent opportunities for constructive learning that can be used in conflict resolution processes. For example, one person we interviewed in Maine had testified that forest practices did not need to be discussed in the NFLC report because "the forest practices were changing even as they spoke and some of the cure has already started to take place." When we asked him to expand on this ILLNESS metaphor and explain both the disease and the cure, he spoke of the illness as past abuses of the forest and the cure as changes in practice brought about by the Clean Water Act, the Forest Practices Act and the "best management practices" policies developed by the timber industry.

The inclusion of the Clean Water Act and Forest Practices Act as part of the cure was a difficult concept for him to weave into the rest of his narrative framework. They stood in opposition to three very dominant themes in the rest of his interview: the need for landowners (and people in general) to take responsibility for their actions, the incompetence of public land management agencies, and the erosion of landowners' rights that are under attack from a coalition of public land management agencies and environmentalists. In order to include regulatory approaches to problem solving in his story, he had to distinguish between legitimate, responsible operators and "pirate type operators." No further regulation of the responsible operators was needed to improve current forest practices. The rest of the cure for the illness depends upon the "enforcement arm of the Maine Forest Service" taking action against "pirate type operators." Ambiguity is created for this person by the fact that the Clean Water Act, the Forest Practices Act, and the enforcement of laws related to forest practices represent exactly the kind of interference and abridgement of landowner rights that he finds so objectionable. Furthermore, the Forest Practices Act was developed and passed through a process of collaboration between Maine timber interests and environmental groups and this creates a disjuncture in his story about the environmental groups as purely hostile to the rights of landowners and the needs to extract resources from the forest.

The interviewees often went to great lengths to include the stories of others into their own stories. There were clear discursive markers that really stood out in the transcripts. As we mentioned before, people would assume the voice of an alternative viewpoint in such a manner that we could hear their use of quotation marks. Thus, an environmental activist talking about the basis for decision-making in the timber industry argues that it "...is not long term. 'What can we do over the long term to increase the quality of our timber and, therefore, the value of the timber out there?' It's more like, 'What do we have out there? How can we get some money

now?' Or, 'We've got this beast to feed up at the mill." This ability to assume the voice of another party was frequently an expression of empathy, an indication that the speaker understood the pressures and concerns of that led others to act in ways that they, themselves, did not necessarily approve.

We also heard a number of personal stories about how people had changed their views and behaviors over time. The same person who transformed the WORKING FOREST metaphor, by emphasizing working with the forest, is an environmental advocate, small business owner, a member of the local school board, and the owner of a 100-acre woodlot. He said, "Whereas, I think I originally bought this piece of land thinking that I wanted to preserve it and just leave it and let mother nature handle things her own way, I've come over the years to manage it and try to do things much in the way that mother nature's doing, but, with my own hands. To perhaps do it in a nurturing fashion." His concept of working with the forest grew out of his own life experience as the owner of forestland. In addition to stories of personal change, we heard many tales about changes in the practice of forestry in institutional settings over the past twenty years.

Many of the people we interviewed also acknowledged in some fashion multiple identities and talked about how these different identities influenced their understanding of forest-related problems. It was quite common for people to respond to the question about why they became involved in the NFLC process with a "catalogue" of identities such as the following: "I am a land owner. I own 260 acres here in an adjacent town, forestland. So, I testified in that regard as a private land owner. In addition, I am a resident of the area being studied. I am employed [by a large paper company] in the area being studied. So, I had a whole lot of gains-losses from the results of what the study was trying to answer." Sometimes, these identities were reflected in a biographical sketch of changing roles and relationships over the course of a lifetime. For example, one person came out of college and worked for the paper industry, then for Maine Audubon, and now is an independent forestry consultant who works with both industry and environmental groups trying to figure out how to do forest management in ways that preserve and protect habitat, species diversity, and the "integrity" of the forest.

Yet, while in many cases there were attempts to weave together multiple stories or at least a tolerance for the opinions and stories of others, some people we interviewed also assigned "ontological priority" to parts of their own stories. Sometimes people's stories about the world took on a canonical nature. They were not only stories about how the world is, but about how it should be. People we interviewed acknowledged that there were differences of opinion, but still thought their own story was better. In some instances, inconsistencies between stories can be very difficult to resolve. How does one weave together the narratives of an environmentalist who says that the forest is an extremely delicate, evenly balanced system and the logger who says that cutting down trees can actually help the natural processes of the forest?

Throughout the interviews we conducted, it was very evident that the stories told to us had motivational power. They were not just fancied up rationalizations for a set of calculations about peoples' interests. Furthermore, these stories were complex, somewhat flexible, and evolving. So, conflict resolution processes that reduce people to bundles of interests, positions, or needs are missing a tremendous chunk of what motivates people to action.

The Bridging and Blinding Ability of Shared Language

Another theme that emerged from our interviews concerned not only the role of shared language in bridging worldviews, but also its ability to mask important worldview differences. Regarding the bridging quality, one interviewee talked about how initially, environmentalists, landowners, and developers seemed fairly polarized. The environmentalists "talked about the forest as a static place." Within this worldview, any change was threatening because it had the potential to knock a delicately balanced system out of kilter. The landowners "talked in terms of individual rights." What our interviewee found interesting about this was that within this discourse, some talked about the right to conserve their land free from outside interference, and others talked about the right to develop it as they wished. The developers focused more on the economics of the situation, and true to their name, talked about development. The different sides often could not sit down at the same table without yelling at each other.

However, according to this interviewee, when the term sustainable development was introduced, it started to bring the groups together, and made the conversation less polarized. Interestingly enough, he said that it was obvious that all the groups had different conceptions of what sustainable development entailed, but the shared language at least created a common goal toward which they all could work. The next step in such a process would involve going beyond shared language to developing different paths leading to the same goal.

One of the goals of the NFLC that participants affirmed was the realization and/or protection of a HEALTHY FOREST. However, there was little agreement on what such a term meant. When asked, "What is a healthy forest?" we got many different stories. To some, forest is simply forest cover made up of trees that are of one inch or greater diameter breast height. According to that measure, Vermont is 85 percent forested, and Maine 92 percent forested. Some people never mentioned soil or animals as part of a healthy forest. Others mentioned all those things, and the trees. One person included the watershed in her definition of the forest. Another person suggested that "a 25-year monoculture, all pine or all spruce plantation that is managed chemically with herbicide to kill all the hardwoods is a very different quality of forest for wildlife and soils and forest health than a 100-year-old, structurally diverse forest." If people start with different definitions or stories about what a forest is, then they are going to have different understandings of what is meant by the terms FOREST SUSTAINABILITY and FOREST MANAGEMENT. Without shared stories or images of forest sustainability and management, people will be unable to agree on standards for measuring successful forest management and sustainability. Thus, implementing or operationalizing the HEALTHY FOREST metaphor will be a highly conflictual process. Agreeing on metaphorical language to describe a shared goal does not eliminate conflict.

When we asked about the HEALTHY ECONOMY metaphor, the response was dead silence followed by very tentative answers. A healthy economy is much less clear to people than their image of a healthy forest. Thus, it is very clear that if the people of the Northern Forest region want to start with the NFLC claim that a healthy forest and a healthy economy are interdependent and use that to promulgate regulations to guide each of the involved states toward

some ideal conception of economic and environmental health, they still have at least three problems. First, people do not share a vision of what constitutes a healthy forest. Second, few people have really thought about what a healthy economy looks like. These are both problems related to ill defined or conflicting models and schema. Finally, the lack of the clarity and the conflicts over these models and schema make it difficult, perhaps impossible, to develop frames for action that are shared and validated by a cross section of the community.

The good news is that even though people often had very different meanings for shared words like forest or community, they at least acknowledged that other people had different stories to tell about those concepts. Indeed, many commented that one of the main benefits of the listening sessions was the opportunity to share their different stories.

Findings: Lessons for Conflict Resolvers

Based on our research of the Northern Forest Dialogues, we believe we can draw out a few lessons for consideration by conflict resolution practitioners. These lessons relate to the processes of problem construction, the relationship between our stories and metaphors about the world and our own identity, the use of metaphorical language that often accompanies the initiation of large scale public processes, and conflict resolution process design.

During the developmental stages of a process such as the NFLC, it is important to remember that how issues are framed represents more than just a political jockeying for power. It is also a process of "bargaining for reality." The power to "name" a problem may be the ultimate form of political power, because once a problem is named in a certain way, that "frame" inevitably affects how the rest of the process is constructed and how it develops. If the economic problem had been named as the primary issue facing the region, the dialogue process and outcome would have looked very different. Business issues would have received greater attention while social and environmental issues would have received less attention.

When groups engage in a process of bargaining for reality, they are doing more than just cynically weighing the balance of political power and attempting to build coalitions that can "win" the issues. The stories and metaphors people tell about the world are tightly woven into their identities. Metaphors and stories are not amenable to the kind of bargaining and horse trading that often goes on in policy discussions. Theorists who describe the formation of coalitions in terms that emphasize bargaining for power and position obscure some important social, cognitive, and emotional processes that deserve attention. Most notably, they overlook processes related to the formation and defense of identity. Environmentalists who want to radically alter current forest practices met strong resistance from many people who lived and worked in the Northern Forest precisely because their rejection of established forest practices threatened both the daily activities related to forest management and the models or schema (assumptions about the nature of the forest) of those who made their living from the forest. Few things, if any, are more threatening to a person's identity than undermining their "knowledge" of the world and their sense of their own place in that world. Imagine trying to solve the conflict in Northern Ireland by telling one side to simply convert to the other side's religion. Telling

someone to stop being a logger, or to quit logging in a particular way, can be very much like telling people to change their religion, or how they conduct their religious practices.

Yet, people and groups are not reducible to a single identity. For example, we interviewed a man who might have been categorized as an environmentalist. He studied ecology and cared deeply about whole ecosystems. But, he had been an employee of a major forest products company, and he lived in the forest, and he owned a small amount of land from which he extracted wood for sale. His views were complex because his identities were complex. If we treated that man as an environmentalist, or a logger, or a landowner, or a recreational user of the forest, we would have constructed a simpler process. But we would have lost the likelihood that he could act as an important translator between others who were more exclusively in one camp or another. Recognizing that he could "see things" from several points of view at once, we might have found a role for him in which he could help others to understand alien perspectives. Or to consider it from an intervenor's perspective, if we designed a process that forced this man to operate as a party in concert with others who shared one of those views, he probably could do it. He could play the role of a logger if we asked him to, but he might not want to. He might drop out of the process because there really was not a place that was comfortable for him. And then we'd lose his insights, wisdom, credibility, and understanding.

Our research found that most people hold complex views of a subject like "the future" or "the environment." These are multifaceted topics. Some negotiation models encourage simplification by clarifying positions, interests and negotiation space. In a "two parties/one issue" type of dispute, that might make sense. But in a complicated case such as the Northern Forest dialogues where there are dozens of intertwined issues and multiple parties, such simplification is a mistake. Instead of suppressing the complexity in people's views, we should encourage it. The complex mix of parties, issues and multifaceted stories is the key to integrative thinking. Practically, this means the first step to resolving the kinds of conflicts we saw in the NFLC case is to design a process that helps the parties identify their own complex identities through the stories they tell and the metaphors they use. Then the work of weaving these stories together becomes clearer, if not any easier.

There are also lessons to be learned about the metaphorical language that seems to accompany the initiation of such processes. People in this case were able to sign onto the process because they identified with the metaphor of a BESIEGED REGION. And, in many ways that metaphor defined the official agenda for the NFLC – particularly those parts of the agenda that focused on reinforcing traditional patterns of land ownership and use and reasserting local control over the future of the region. However, it would be a big mistake to assume that this metaphorical language was understood in the same way by all of the parties who were involved in the NFLC. One of the powers of metaphorical language rests precisely on its ambiguity and flexibility. People involved in the NFLC may have shared a descriptive model or story of the Northeastern United States as a BESIEGED REGION and they may even have been united with one another by a desire to RESIST that situation. This does not imply the identification of a common enemy against whom they agreed to direct their resistance. Indeed, many of them came to the dialogue thinking that the enemies – or at least enemy sympathizers – were also coming to the table. Shared metaphors are a powerful way of bringing parties to the table, but can often mask different meanings given to similar words.

Our research also suggests that an important component of both large and small scale dialogues such as the NFLC is to design a process that does two things – help the parties involved acknowledge the different ways they structure the world, and keep one discourse or worldview from dominating the process. Other practitioners dealing with environmental conflicts have started to use methods that encourage shared decision making and mapping mental models as effective tools to resolve disputes. 30 Our research with the NFLC helps explain why processes that provide an environment where the parties are encouraged to "define" their competing worldviews and then see how these multiple realities can be integrated might be more effective at building consensus and resolving conflicts than interest-based, bargaining processes. As conflict resolution practitioners, we must not exclude ourselves from the type of critical reflection that we would urge upon parties involved in conflicts over forest management. Our own metaphors for environmental conflict resolution need to be more consciously examined. When we talk about "parties" and their "interests," are we creating a frame that implies parties are "reducible" to their interests or goals or needs? Do we, in fact, create something resembling caricatures of people whose real lives and motives are far more complex than we would assume if we only focus on their interests or goals or needs?

Conclusions: The Meaning of Our Work

Based on the results of our research, there are two broad sets of conclusions to be drawn that apply to the theory and practice of conflict resolution. The first set of conclusions applies to our macro-level understanding of how worldviews work to influence people's behavior in situations of social conflict. The second apply to our more micro-level understanding of how conflict resolution is practiced.

At the macro level, our research seems to confirm that meaning is created and modified in deep cognitive structures that are not easily seen or addressed. Meaning is important because it provides the unconscious foundations on which visible values, interests and positions rest. The better articulated positions and interests may be presented coherently if the culture expects such. But the neat presentation may not accurately represent underlying thought. The complex, "messy" nature of worldviews defies the kind of linear or logical direct approaches designed for analysis and resolution of conflicts at the levels of positions or interests.

A worldview perspective argues for a new conceptualization of social conflict. Historically, the type of large scale, multi-stakeholder conflict found in the NFLC process has been described as a "clash of paradigms." Here competing worldviews vie for dominance, with one winning out because its adherents can either mobilize greater political, financial, and social capital in support of their beliefs, or because the worldview is an "objectively" better description of the world, resulting in better decisions which are then supported by a majority of the stakeholders to the conflict. In either case, one worldview "wins," while the others are defeated. Our interviews revealed that rather than one "dominant paradigm," worldviews actually contain multiple stories. Some of these stories complement and reinforce each other, some are unrelated, and some are in active conflict and tension with each other. Worldview narratives also spill across boundaries that might be set by an outside observer, hence the multifaceted narratives of

our interviewees who claimed as part of their identities logger, environmentalist, and community resident.

While there are certainly aspects of worldviews that can be described as dominant, our understanding of what happens when worldviews clash challenges the "revolutionary" model of social change, with one paradigm replacing or overthrowing another. What we saw during the multi-year NFLC process was an intricate set of dialogues where narratives drawn from diverse worldviews began to be woven together into a new whole. It is important to point out that this was not always the case. Some narrative accounts, such as those that see the forest as a pristine, delicate place where the slightest disturbances threaten the ecological balance, resisted blending. What we did see was that people who had complex narrative identities – those in touch with both their inner logger and environmentalist – were able to look at worldviews other than their own and begin the process of fitting together their ontological and epistemological stories about forest and community in ways that were at least tolerant, if not complementary.

For a macro-level understanding of how conflicts evolve and are transformed through dialogue, our research has significant implications. Rather than resulting in a single, unified narrative as is often implied in phrases like "finding common ground," the process of conflict resolution may offer the opportunity for individuals and communities to work through the ways that different, and even competing, narrative can coexist without damaging social relationships or the ability to work together to overcome shared challenges. A worldview-influenced perspective also questions the efficacy of the traditional "majority rules" approach to decision making. Our research suggests a need for continued exploration of the ways communities govern themselves that are based on the recognition and inclusion of multiple worldviews. This finding suggests several modifications to established practices for conflict resolvers. Decision making processes that divide people into narrowly configured stakeholder groups risk stifling the ability of participants to draw upon their own diverse and complex identities. By calling one set of stakeholders loggers, industry, or environmentalists, people are guided into drawing on that aspect of their identity in a dialogue with others. In the interview process, we found that the people who were most able to express the multiple narratives that created their own identities were also the most flexible in understanding the worldviews of others. Conflict intervenors who can identify people with complex identities may then be able to enlist their assistance as natural "translators" among others who are looking at the world from only one or two perspectives. Demonstrating that the values of a logger and an environmentalist can coexist within the same person presents a powerful symbol that may help others think about constructing social institutions and policy that respect and incorporate different ways of viewing and valuing the world.

In the admittedly safe space created by the interview process, most people were willing to experiment with worldviews. We found the interviewees to be much more open than expected to "playfully" examining their own worldviews by looking at the various metaphors used in the NFLC process. One suggestion for practice that was not tested, but which seems promising, would be to begin a decision-making process or other type of collaborative forum by having participants examine the metaphors and narratives drawn from the dialogue among them up to that point, much as we did in the interview process. As this process elicits people's own

metaphors and narratives in response, a skillful facilitator or mediator could help the parties begin to examine their own conscious and unconscious construction of the conflict.

A second suggestion for conflict intervenors would be to work with participants to a decision making process from the beginning to explore the different aspects of their own identities. This can be as basic as simply asking a question such as "Which hats do you see yourself wearing at this table," and then using the answers to begin a discussion about how a single individual can see the issues from multiple perspectives. The purpose of any such exercise would be to help all participants realize that they hold within themselves different narrative accounts of the issues, and thereby help prevent them from becoming trapped into viewing the conflict from one particular point of view. A second goal of this type of effort would be to use the experiences of the individuals working through their own internal narrative conflicts to model such a process of dialogue as applied to dealing with differences that exist within the larger group as a whole.

As mentioned in the previous section of this chapter, a worldview-sensitive perspective would also recommend against separating participants in conflict resolution processes into narrowly defined groups of stakeholders. It should be acknowledged that many of the processes and theories currently used by conflict resolution practitioners were initially developed for the field of labor-management negotiation, where parties and their interests are more clearly defined. Especially in environmental conflicts, such assumptions often fail to reflect the rich complexity of the narratives expressed both by individuals and communities as a whole. Asking participants to consciously "shift voice" to speak from different perspectives, structuring opportunities into conflict resolution processes to acknowledge worldview diversity, and not dividing participants into single-perspective stakeholder groups are all practical applications derived from our research. This also suggests a variety of topics to be explored in future research, such as the most effective methods for eliciting different narrative accounts from people, how individuals construct "internal" dialogues among their own narratives, and how to teach participants in conflict resolution processes to identify their own narratives and those of others.

Acknowledging and legitimating someone's structure of meaning seems particularly liberating. Our hope is that worldview dialogues will help move people from absolutist statements like "this is how the world is and how it should be" to ones more like "this is how I see the world, but I know there are other possible perspectives." The point would not be to convince the parties their worldview is valueless, simply that it is only one of many ways to see and value the forest, a community, or whatever issue is on the table.

Finally we stress that the nature of our research into this topic remains exploratory and inconclusive. The next step is to move beyond the interview process detailed in this research report and use an actual "metaphor dialogue" as suggested by Nudler as a component to a collaborative problem solving process. Viewing such an exchange from a worldview perspective would provide much needed data on what happens when people engage in a face-to-face dialogue about their metaphors and narratives, instead of proxy discussion prompted by an interviewer. However, we do feel that the initial results from our analysis of the NFLC process and the interviews conducted with its participants suggest a rich vein of new thinking about the theory and practice of conflict resolution. It is our hope that this initial research will prompt an

ongoing discussion of these compelling issues; a discussion we think will promote new ways of "thinking about" and "doing" conflict resolution practice.

APPENDIX A: Narrative Themes

In the various listening sessions held in the four states, a number of interesting metaphors and narratives appeared in the texts of the transcripts. It is important to note that many of these categories represent "composite" narratives and metaphors pulled together from several different sources. Since there were as many stories as there were speakers, an effort was made by the research team to focus on overlapping and shared narratives and their constituent metaphors.

<u>Common Ground</u>: Many of the speakers at the listening sessions talked about the idea of common ground between the participants in the NFLC process. As illustrated by the varied metaphors discussed above, there was a fair amount of overlap between the positions, interests, and values of the participants. However, it is important to make a distinction between common ground created through shared language and common ground created through shared meaning. While many speakers used similar metaphors, they were often combined in different ways with nuanced references to very different worldviews.

<u>Insiders/Outsiders</u>: This was one of the more common metaphors used when talking about the "outside forces" that were seen as influencing community life. Alternatively, both logging companies and the environmental community were referred to as outsiders who had no claim to either offer proper courses of action or speak about the issues at hand. Ironically, the majority of the speakers identified themselves as being insiders, often classifying those they disagreed as outsiders. In a region where social identities are often defined by how many generations a family has lived in a town, there were strong feelings expressed about who could lay legitimate claim to speak and be recognized by the community.

Outside Forces: A set of physical metaphors was often used to describe the "pressures" placed upon the forest communities, both in terms of economic pressure from outside forces beyond local control and political pressure seen as coming from a variety of different "outside" groups. Closely related to the insider/outsider metaphors used to categorize interlocutors in the public meetings, the metaphor of outside forces was also closely linked to the idea that things were "out of control." This was used to refer to a range of events, including threats to both the economy and the ecosystem. Another "shared" metaphor, this way of speaking was found in the testimonies of many local residents at different listening sessions.

Stewardship: One common metaphor used to talk about ethical responsibilities to the environment was the idea of stewardship. Again, this was a metaphor that could be configured in a variety of different ways, ranging from a religious sense of stewardship to one based on a more secular conception of moral obligations to future generations. The temporal calculations described by this metaphor often varied as well, ranging from a sense of stewardship that looked forward fifty years, to ones that used an almost geological sense of time. Speakers who used the working and pristine forest metaphors often talked about feeling a sense of stewardship, making this a common term with a variety of meanings tied to the context within which it was used.

The "Healthy" Community: One common way of gauging the state of the relationship between forest and community was to talk about the "health" of one or both. The forest was seen as

something that could get physically sick from over harvesting, pollution, and development. The economy, often referred to as being integrally linked to the forest, was measured as sick or healthy depending on its ability to provide a living wage for the community. This metaphor is interesting because of the interdependent and potentially antagonistic relationship painted between the local ecology and economy, where an economy that is "too healthy" (growing too fast) can harm the forest.

The Evolving Forest: This metaphor is especially interesting because it often cuts across many group identities that were expressed in the listening session. This metaphor frames the forest as a locus of constant growth and change. At a minimum, there are natural cycles of change that can be identified that relate to the growth, development, and replacement of different parts of the ecosystem. From this perspective, managed and moderate amounts of human use of the forest can actually have positive impacts, as long as the activities are based upon an understanding of the natural rhythms that govern forest life. This view was expressed by individuals who self-identified as loggers and environmentalists, just to take two groups that are often pictured as being in conflict. Within this rhetorical account, however, is room for conflict. How much and what kind of human activities are acceptable and how to determine the natural cycles of the forest are only two of the more important issues unresolved by this metaphor.

The Forest Community: This is one metaphor for community that again cut across many social categories. Given the connection, both ecologically and physically, between many communities and the forest, there was a strong sense expressed that separating either concept was extremely difficult, if not impossible. For these metaphors about the nature of community, the forest was seen as an integral part of the living and working environment. Here, the community's social and economic activities were seen as one of the natural patterns of the broader environment. This metaphor was also associated with the working forest and evolving forest metaphors, and carried as sense that the boundaries between nature and community interpenetrated at several different levels.

The Patchwork Community: This metaphor pictured the overall environment as one of different "patches" that fit into the broader quilt of the region – forest, economy, and community were all listed as the three biggest pieces. This metaphor pictured connections between these concepts, but more as separate entities consciously stitched together. There was a more mechanical sense that the forest, community, and economy were bounded, definable categories that could be differentiated and examined as a "piece" of the broader social landscape. Again, this picture of the community contains elements of other metaphors, and was mentioned by a variety of different speakers during the listening sessions.

The Pristine Forest: This metaphor has two primary parts – a claim that the forest is both "natural" and "delicate." What the first part of this metaphor does is juxtapose the "naturalness" of the forest against the artifice of man's activity in nature. Logging, development, and even many forms of recreation are seen as potentially damaging to the ecosystem, and therefore should be limited as much as possible. The second part of this claim is that the forest is delicate – thousands of years of growth can be destroyed by a decade of man's economic incursion. Obviously, both parts of this metaphor are mutually reinforcing, with small threats and impacts on the forest feared because of the stochastic effects they might have as damage cascades

through different parts of the ecosystem. Implied in this metaphor is the image of the forest as static, where change is slow and natural, occurring over a much longer time cycle than that used in many other narrative accounts of the forest.

The Working Forest: Many people who gave testimony at the listening sessions described the Northern Forest as a "working" forest, meaning that its resources were a key part of sustaining the local economy. This metaphor seems to evolve as a challenge to other metaphors that emphasize the "naturalness" of the forest, ecology without artifice as it were. Within this context, there is a dependent relationship between forest and community, but more like the relationship between workers and their factory. The health of the forest, and its ability therefore to "work," is obviously seen as critical, but its main value lies in its ability to support the community economically. Several people who used this metaphor also expressed strong environmental values rooted in their use of the forest for other purposes, like hunting, fishing, and camping. This particular metaphor is also complementary to many metaphors used to describe silviculture, or the "forest as farm" metaphor that was discussed earlier.

APPENDIX B: INTERVIEW PROTOCOL

Section I: The Northern Forest Lands Council

A. Participation

Why did you get involved in the NFLC process?

How did you participate?

What did you want to accomplish?

What's happening now? Are you involved in further steps?

B. Process itself

What did you like about the NFLC process?

Dislike?

Section II: Expanding upon Personal Metaphor and Responding to Metaphors of Others

A. Expanding upon their own metaphor

Example: "In the listening session, you referred to, 'the unraveling of forest ownership patterns.' I was intrigued by that because it made me think of fabric and a thread and a weave. Can you tell me what the pattern looked like before it started unraveling?"

B. Responding to the metaphors of others - complementary and contradictory

Example (complementary): "Someone else, in their testimony, said that forest land conversion is an understated threat to the Northern Forest and that it's not so much to rate of development as the pattern. Is that similar to what you were saying? It's not just the quantity of development, but where it is taking place..."

Example (contradictory): "Another person talked about the loss of agricultural communities and the conversion of a lot of farmland back to forest during the last 30 or 40 years. How does that changing pattern relate to your concerns about forest ownership patterns?"

Section III: NFLC Metaphors taken from the final report

A. Asking them to expand upon metaphors that had been "validated" in the final report

Example: "The final report of the NFLC was titled, Finding Common Ground. What did they mean by finding common ground? What was this ground? Did they find it? What does it look like?"

Example: "The final report of the NFLC states that 'fostering good stewardship is key to a healthy forest and a healthy economy.' Can you tell me what good stewardship is? How do you recognize good stewardship when you see it?" Later pick up with this theme by asking, "How do you know when a forest is healthy? If you took me to a forest that you think is healthy, what would I see? Smell? Hear? Feel?"

REFERENCES

Augsburger, David W. Conflict and Mediation Across Cultures: Pathways and Patterns. Louisville, KY: Westminster/John Knox Press, 1992.

Black, Max. Models and Metaphors. Ithaca: Cornell University Press, 1962.

Bruner, Jerome S. Acts of Meaning. Cambridge: Harvard University Press, 1990.

Carpenter, Susan L. and W.J.C. Kennedy. *Managing Public Disputes*. San Francisco: Jossey Bass Publishers, 1991.

Clark, Mary E. Ariadne's Thread: The Search for New Models of Thinking. New York: St. Martin's Press, 1989.

Docherty, Jayne S. "Oscar Nudler Presents Latest Developments in Cognitive Theory of Conflict and Conflict Resolution," *ICAR Newsletter*, 7:1 (Spring 1995): 10-11.

_____. "The Stewardship Metaphor in Forest Resource Management Conflicts: A Common Language Does Not Guarantee Consensus," in McFarland, D. et al., eds., Conflict Analysis and Resolution: Challenges for the Time. Fairfax, Va.: The Institute for Conflict Analysis and Resolution, 1996.

Druckman, Daniel and K. Zechmeister. "Conflict of Interest and Value Dissensus: Propositions in the Sociology of Conflict," *Human Relations* 26 (1973): 449-466.

D'Andrade, Roy and Claudia Strauss, eds. *Human Motives and Cultural Models*. Cambridge: Cambridge University Press, 1992.

Fisher, Roger and William Ury. Getting to Yes: Negotiating Agreement Without Giving In. Boston: Houghton Mifflin Company, 1980.

Hunter, Susan. "The Roots of Environmental Conflict in the Tahoe Basin," in Louis Kriesberg, Terrello Northrup, and Stuart Thorson, eds. *Intractable Conflicts and Their Transformation*. Sysracuse: Syracuse Press, 1989.

Indurkhya, Bipin. Metaphor and Cognition: An Interactionist Approach. Boston: Kluwer Academic Publishers, 1992.

Kittay, Eva F. Metaphor: Its Cognitive Force and Linguistic Structure. Oxford: Clarendon Press, 1987.

Lakoff, George. Women, Fire, and Dangerous Things: What Categories Reveal About the Mind. Chicago: University of Chicago Press, 1987.

and Mark Johnson. Metaphors We Live By. Chicago: University of Chicago Press,

1980.

Laszlo, Ervin, Ignazio Masulli, Robert Artigiani, and Vilmos Csanyi. *The Evolution of Cognitive Maps: New Paradigms for the Twenty-first Century*. Langhorne, PA: Gordon and Breach Science Publishers, 1993.

Lehrer, Adrienne. Semantic Fields and Lexical Structure. New York: American Elsevier Publishing Company, 1974.

and Eva F. Kittay. Frames, Fields, and Contrasts: New Essays in Semantic and Lexical Organization. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers, 1992.

Moore, Christopher W. The Mediation Process (2nd ed.). San Franscisco: Jossey-Bass, 1996.

Morley, Ian and Geoffrey Stephenson. *The Social-Psycology of Bargaining*. London: George Allen & Unwin, Ltd, 1977.

Northern Forest Lands Council. Finding Common Ground: Conserving the Northern Forest. Concord, NH: Northern Forest Lands Council, 1994.

Nudler, Oscar. "On Conflicts and Metaphors: Toward an Extended Rationality," in John W. Burton, ed. *Conflict: Human Needs Theory*. New York: St. Martin's Press, 1990.

"In Search of a Theory for Conflict Resolution: Taking a Look as World Views Analysis," *ICAR Newsletter*, 5:5 (1993):1-5.

Ortony, Andrew. Metaphor and Thought. Cambridge: Cambridge University Press, 1993.

Ozawa, Connie P. Recasting Science: Consensual Procedures in Public Policy-Making. Boulder, Colo.: Westview Press, 1991.

Pruitt, Dean G. and Peter J. Carnevale. *Negotiation in Social Conflict*. Pacific Grove: Brooks/Cole Publishing, 1993.

Quinn, N. "Convergent Evidence for a Cultural Model of American Marriage," in Dorothy Holland and Naomi Quinn, Naomi, eds. *Cultural Models in Language and Thought*. Cambridge: Cambridge University Press, 1987.

Raphael, Ray. More Tree Talk: The People and Politics of Timber. Washington, D.C.: Island Press, 1981.

Reidel, C. "The Political Process of the Northern Forest Lands Study," in Christopher M. Klyza and Stephen C. Trombulak, eds. *The Future of the Northern Forest*. Hanover, NH: Middlebury College Press, 1994.

Ross, Marc Howard. The Culture of Conflict: Interpretations and Interests in Comparative Perspective. New Haven: Yale University Press, 1993.

Shannon, M. A. "Managing Public Resources: Public Deliberation as Organizational Learning." *UMI Dissertation Abstracts*, Berkeley: University of California, 1989.

Susskind, Lawrence and Jeffrey L. Cruikshank. *Breaking the Impasse: Consensual Approaches for Resolving Public Disputes*. New York: Basic Books, 1987.

Tannen, Deborah. Framing in Discourse. New York: Oxford University Press, 1993.

Walker, George B. and S. E. Daniels. "Public Deliberation and Public Land Management: Collaborative Learning and the Oregon Dunes." Paper presented at Speech Communication Association, New Orleans, Louisiana, November 19, 1994.

. "Managing Conflict in Fire Recovery Planning: Public Participation as Collaborative Learning," paper presented at Western States Communication Association, Portland, Oregon, February 13, 1995.

Wondolleck, Julia M. Public Lands Conflict and Resolution: Managing National Forest Disputes. New York: Plenum, 1988.

NOTES

¹ Daniel Druckman and K. Zechmeister, "Conflict of Interest and Value Dissensus: Propositions in the Sociology of Conflict," *Human Relations* (1973), p. 26.

² Christopher W. Moore, *The Mediation Process* (2nd ed.) (San Franscisco: Jossey-Bass, 1996) p. 58.

³ Moore, *The Mediation Process*, p. 60.

⁴ Moore, *The Mediation Process*, p. 220. See also Susan. L. Carpenter and W. J. D. Kennedy, *Managing Public Disputes* (San Francisco: Jossey-Bass Publishers, 1991), p. 201; Ian Morley and Stephenson Geoffrey, *The Social-Psychology of Bargaining* (London: George Allen & Unwin, Ltd, 1977), p. 34; Howard M. Ross, *The Culture of Conflict: Interpretations and Interests in Comparative Perspective* (New Haven: Yale University Press, 1993), p. 82; Druckman and Zechmeister, "Conflict of Interest and Value Dissensus"; and Dean G. Pruitt and Peter J. Carnevale, *Negotiation in Social Conflict* (Pacific Grove: Brooks/Cole Publishing, 1993), p. 148.

⁵ Moore, *The Mediation Process*, p. 60.

⁶ Oscar Nudler, "On Conflicts and Metaphors: Toward an Extended Rationality," in John Burton ed., Conflict: Human Needs Theory (New York: St. Martin's Press, 1990), pp. 177-201; Oscar Nudler, "In Search of a Theory for Conflict Resolution: Taking a Look as World Views Analysis," ICAR Newsletter, 5:5 (1993), pp. 1-5.

⁷Mary E. Clark, *Ariadne's Thread: The Search for New Models of Thinking* (New York: St. Martin's Press, 1989).

⁸ See Susan Hunter, "The Roots of Environmental Conflict in the Tahoe Basin," in Louis Kriesberg, Terrello Northrup and Stuart Thorson, eds., *Intractable Conflicts and Their Transformation* (Syracuse, N.Y.: Syracuse Press, 1989), pp. 25-40.

⁹ See David W. Augsburger, Conflict and Mediation Across Cultures: Pathways and Patterns (Louisville, Kentucky: Westminster/John Knox Press, 1992), p. 33; Connie P. Ozawa, Recasting Science: Consensual Procedures in Public Policy-Making (Boulder, Colo.: Westview Press, 1991).

¹⁰ Northern Forest Lands Council, Finding Common Ground: Conserving the Northern Forest (Concord, NH: Northern Forest Lands Council, 1994).

¹¹ See Nudler, "In Search of a Theory for Conflict Resolution"; Jayne S. Docherty, "Oscar Nudler Presents Latest Developments in Cognitive Theory of Conflict and Conflict Resolution," *ICAR Newsletter*, 7:1.

¹² We relied heavily on the following sources related to metaphor: Max Black, *Models and Metaphors* (Ithaca, N.Y.: Cornell University Press, 1962); Bipin Indurkhya, *Metaphor and*

Cognition: An Interactionist Approach (Boston, Mass.: Kluwer Academic Publishers, 1992); Eva F. Kittay, Metaphor: Its Cognitive Force and Linguistic Structure (Oxford: Clarendon Press, 1987); George Lakoff and Mark Johnson, Metaphors We Live By (Chicago: University of Chicago Press, 1980) and Andrew Ortony, Metaphor and Thought (Cambridge: Cambridge University Press, 1993).

¹³ See Roger Fisher and William Ury, Getting to Yes: Negotiating Agreement Without Giving In (Boston: Houghton Mifflin Company, 1980); Lawrence Susskind and Jeffrey Cruikshank, Breaking the Impasse: Consensual Approaches for Resolving Public Disputes (New York: Basic Books, 1987); Carpenter and Kennedy, Managing Public Disputes; and Julia M. Wondolleck, Public Lands Conflict and Resolution: Managing National Forest Disputes (New York: Plenum, 1987).

¹⁴ Ervin Laszlo, Ignazio Masulli, Robert Artigiani, and Vilmos Csanyi, *The Evolution of Cognitive Maps: New Paradigms for the Twenty-first Century* (Langhorne, PA: Gordon and Breach Science Publishers, 1993).

¹⁵Jerome S. Bruner, Acts of Meaning (Cambridge, MA: Harvard University Press, 1990).

¹⁶ Roy D'Andrade and Claudia Strauss, *Human Motives and Cultural Models* (Cambridge: Cambridge University Press, 1992).

¹⁷ Deborah Tannen, ed., Framing in Discourse (New York: Oxford University Press, 1993).

¹⁸ Ray Raphae, *More Tree Talk: The People and Politics of Timber* (Washington, D.C.: Island Press, 1981); Jayne S. Docherty, "The Stewardship Metaphor in Forest Resource Management Conflicts: A Common Language Does Not Guarantee Consensus," in D. McFarland et al., eds., *Conflict Analysis and Resolution: Challenges for the Time* (Fairfax, Va.: The Institute for Conflict Analysis and Resolution, 1996).

¹⁹ Cited in Northern Forest Lands Council, Finding Common Ground, p. 5.

²⁰ Northern Forest Lands Council, Finding Common Ground.

²¹ Northern Forest Lands Council, Finding Common Ground.

We developed a recording by using Kittay's theory that ties metaphor to semantic field theory. See Kittay, *Metaphor*; Adrienne Lehrer and Eva F. Kittay, *Frames, Fields, and Contrasts: New Essays in Semantic and Lexical Organization* (Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers, 1992); Adrienne Lehrer, *Semantic Fields and Lexical Structure* (New York: American Elsevier Publishing Company, Inc, 1974) for the theoretical basis of our recording form. See Docherty, "The Stewardship Metaphor in Forest Resource Management Conflicts" for an application of this theory to the stewardship metaphor in forest management conflicts.

²³ NFLC, Finding Common Ground, p. 3.

²⁴ NFLC, Finding Common Ground, p. 3.

²⁵ NFLC, Finding Common Ground, p. 4.

²⁶ NFLC, Finding Common Ground, p. 21.

²⁷ NFLC, Finding Common Ground, p. 21.

²⁸ For theoretical works on categorization and the role of categories in worldviews, see George Lakoff, *Women, Fire, and Dangerous Things: What Categories Reveal About the Mind* (Chicago: University of Chicago Press, 1987).

²⁹ C. Reidel, "The Political Process of the Northern Forest Lands Study," in Christopher M. Klyza and Stephen C. Trombulak, eds., *The Future of the Northern Forest* (Hanover, NH: Middlebury College Press, 1994), pp. 93-111.

³⁰ See M. A. Shannon, "Managing Public Resources: Public Deliberation as Organizational Learning," *UMI Dissertation Abstracts* (Berkeley: University of California, 1989); George B. Walker and S. E. Daniels, "Public Deliberation and Public Land Management: Collaborative Learning and the Oregon Dunes," paper presented at Speech Communication Association, New Orleans, Louisiana, November 19, 1994; and George B. Walker and S. E. Daniels, "Managing Conflict in Fire Recovery Planning: Public Participation as Collaborative Learning," paper presented at Western States Communication Association, Portland, Ore., February 13, 1995.

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