

Culture, worldviews, communication styles, and conflict in forest management

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Abstract

This paper explores culture, worldviews, communication styles, and conflict among stakeholders in forest and natural resource management. It addresses the fact that forest managers and stakeholders often speak about forest resources very differently, and it makes suggestions for improving communication among them. It also reviews the history of the development of worldviews regarding the environment. The paper draws from studies of environmental perception, conflict, and communications. A central argument is that culture, values, and communication styles are strongly linked with conflict, and that improved understanding of other cultures—and one's own culture, values, and communication styles—can reduce the negative consequences of conflict and lead to better resource management decisions. We believe that the success of conflict prevention and resolution depends on the ability of all parties—forest managers and stakeholders—to understand and respect all worldviews.

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Introduction

Integrated resource management often involves a variety of people who represent a multitude of interests (Duffy and Roseland 1996). Dearden and Mitchell (1998, p.542) define a stakeholder as “any person or group with a legal responsibility relative to a problem or issue, likely to be affected by decisions or actions regarding the problem or issue, or able to provide an obstacle to a solution of the problem or issue.” In the British Columbia context, a forest manager is often differentiated from a stakeholder.¹ Decision-making processes related to natural resource management have encouraged public participation. For example, in the early 1990s, the Canadian government’s Green Plan for environmental management emphasized building partnerships with all stakeholders (Government of Canada 1990). Public participation has continued to be an essential aspect of integrated resource management in Canada.

Public participation often includes conflict. Whereas conflict is a part of the democratic process and its existence can often lead to better decisions, it must be dealt with explicitly. In British Columbia in the early 1990s, community participation and dispute resolution were two facets of the Commission on Resources and Environment’s (CORE) land-use planning process (1995). The Saskatchewan Round Table on Environment and Economy (1992) found that conflicts occur when stakeholders favour using limited resources for different purposes, and when decision-making involves too few options. Dearden and Mitchell (1998, p.248) comment that conflict occurs because of “clashing or incompatible values, interests, needs or actions.” These disputes can be costly and time-consuming (Duffy and Roseland 1996). Better mechanisms for dealing with differences are needed.

Kearney and Bradley (1998) outline the importance of incorporating human values into the process of making decisions about forestland and natural resources. They show that since the 1960s, policy makers in the United States have recognized that many people value forests for more than their commodity characteristics, and this has been acknowledged in the decision-making process. In the United States, the National Environmental Policy Act (NEPA) acknowledges different human values placed on the environment and requires public participation in

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land-use planning on public lands. More recent initiatives such as “New Perspectives” also embrace values and other “human dimensions” into land-use planning in the United States (Bergstrom and Cordell 1999; Kearney and Bradley 1998). As decision-making related to forests and natural resources now involves an increasing number of diverse stakeholders (Vining 1992), the parties need to consider the wide range of values being represented.

Most of the forestry and natural resources literature that deals with conflict and decision-making relates to social psychology in natural resource management. One of the challenges is that words such as “values” are widely used, but operational definitions are not given (e.g., Bengston 1994; Kearney and Bradley 1998).

Understanding social anthropological concepts such as “worldview” and “cosmology” can help forestry practitioners understand why and how conflict occurs. The term “worldview,” however, is also not clearly defined in the natural resource literature. Much of the forestry literature has focused on “human dimensions” such as values, perceptions, and attitudes (e.g., Kearney and Bradley 1998), but little of the literature also ties in cosmology and worldview. This paper will link cosmology, worldview, values, attitude, and perception to help describe differences among people in the natural resources sector. Moreover, we will describe the historical development of environmental worldviews. We argue that knowledge and respect for worldviews of different stakeholders will enable forest and natural resource managers, and other stakeholders, to deal with the complexity of decision-making when various stakeholders are involved. This paper will examine terminology that can lead to conflict, and provide recommendations for improving communications among stakeholders.

¹ Various First Nations in Canada have stated that they do not consider themselves stakeholders because they feel that they have ownership rights that distinguish them from those who have a lesser stake in the land. However, the concepts in this paper also apply to cultural differences between First Nations and non-First Nations people.



Values and Attitudes

The word “values” is commonly used in geography and natural resource literature, but often its meaning will vary with the context and/or the user. According to Gollege and Stimson (1997, p. 197), values can be defined as “enduring beliefs” about certain behaviour or decisions. Schwartz (1992) claims that these beliefs are about people, their actions, or events; he states that values are not qualities inherent in objects. Rather, values are used to evaluate the worthiness of phenomena (Lee 2000). In British Columbia, the term “values” is often used to describe products of the forest such as “wildlife values” or “watershed values” rather than to associate values with people. In this paper, we use the word “values” to refer to core beliefs that form the basis of individuals’ attitudes and actions.

Aitken et al. (1989) argue that both physical and human-modified landscapes are viewed or experienced through a filter of cultural values. In decision-making, people usually have to apply their values to the facts before they can make an appropriate response (Golledge and Stimson 1997). According to Feldman (1999), people use value systems to construct attitudes.

Attitudes are learned and they predispose a person to act in a certain way (Golledge and Stimson 1997). In the geography and natural resource literature, critics say that attitudes, perceptions, and other psychological terms have been used loosely and have not been well defined (e.g., Gollege and Stimson 1997; Downs 1981). For this paper, we define attitudes using Tuan’s definition (1974, see below); people’s attitudes toward something can change as they receive (perceive) new information about it.

Cosmology and Worldviews

Levinson (1995, p. 243) defines cosmology as “... people’s ideas about the origin and structure of the universe.” Levinson (1995, p. 243) says that people from all cultures generally believe three things about the universe: “... 1. the universe consists of multiple layers of phenomena, 2. that a set of core elements comprises the universe, and 3. some elements of the universe are polluting.” In a modern-day North American context, Levinson points out, cosmological differences are most apparent between aboriginal and non-aboriginal people.

A worldview is generally a narrower concept than cosmological one. Based on Jones’ (1972) detailed assessment of worldview, Tuan (1974) defines a worldview as a system of structured attitudes or beliefs. Similarly,

Levinson (1995) defines a worldview as a group’s or individual’s set of beliefs about their place in the universe.

An example of a cosmology and subsequent worldviews comes from Africa. Kalu (2001) talks about how some people in West Africa believe the world is a sacred egg, able to sustain life. He states that “... myths of origin ... are vehicles of worldview.” All these “cosmologies” are based on a divine super-being. Kalu (2001) mentions that indigenous cultures express worldviews through proverbs and folk myths. Worldview, similar to culture, is dynamic (Kalu 2001). An example of contrasting worldviews comes from the Elaho Valley in British Columbia, a site of confrontations between protesters and forestry company employees in 1999. Fighting to preserve old-growth trees, protesters set up blockades. Fundamentally different worldviews regarding the role of old-growth forests eventually led to violence (Hamilton 2001).

The term “worldview” has been used widely in natural resource literature. Worldview has been used in studying risk perception associated with hazards (e.g., Peters and Slovic 1996). Peters and Slovic categorize worldviews into personality categories such as fatalistic or individualistic; these worldviews influence people’s perception of, and response to, issues such as nuclear power. Contemporary worldviews, such as those regarding societal and technological issues, tend to become dichotomized into “camps” based on people’s beliefs, e.g., rapid economic growth versus slower (“sustained”) economic growth, high technology versus low technology, and decentralization versus centralization (Buss and Craig 1983). Also, the trend in the literature is to contrast the new environmental worldview (related to the environmental movement in the 20th century) with the dominant (status quo) worldview as a theoretical framework for analyzing people’s responses to environmental problems (Arcury and Christianson 1990).

Historical Development of the New Environmental and Dominant Worldviews

To understand modern worldviews regarding the environment in the western hemisphere—particularly the emergence of the new environmental worldview—we will describe four approaches or eras that have developed over the past three centuries. In roughly chronological order, they are the Age of Enlightenment, the Counter-Enlightenment era, the Expansionist era, and the Ecological Worldview (Taylor 1992). Examination of these approaches helps explain the ways in which today’s natural resource



managers and stakeholders view the relationships between humans and nature, and how conflict can arise.

Traditional societies throughout the hemisphere existed for many centuries before significant change occurred in the 18th century. Many traditional societies were displaced during the Age of Enlightenment in Europe. During this period, people emphasized the use of positivist reason that challenged traditional doctrines and knowledge. The methodology soon dominated traditional cultural knowledge (Taylor 1992). There was a general belief that basic human needs could be met through mastery over nature.

A key factor in the success of conflict prevention and resolution is the ability of forest managers and stakeholders to understand the source of others'—and their own—worldviews.

The Counter-Enlightenment Era emerged in the late 18th and early 19th centuries. It attempted to reunify the spiritual, emotional, and intuitive elements of humanity's relationship with nature that had been effectively displaced in the previous era. American writers and philosophers Emerson and Thoreau, for example, promoted the intrinsic values of nature during this time.

Subsequently, the Expansionist Era accompanied the industrial period of western development. The philosophy is anthropocentric (human-centered), and is characterized by a tendency to classify, compartmentalize, and fragment science and management into separate disciplines and specialties (Kennedy et al. 1998). By equating progress with satisfying human needs, people who subscribed to this approach saw nature as a storehouse of resources, and as having utilitarian and economic uses as its primary values. Gifford Pinchot, well-known chief of the United States Forest Service in the early 20th century, is described as a member of the "utilitarian wing" of the conservation movement and can serve as an icon of this era.

Pinchot wrote, "... conservation means the greatest good to the greatest number for the longest time. It demands the complete and orderly development of all our resources for the benefit of all the people" (Library of Congress 2002).

Fourth, in the Ecological Worldview approach, people believe that the universe is non-dualistic, with its parts inter-related and interlocked. It is a non-anthropocentric view whereby nature is seen as intrinsically valuable, i.e., as having value apart from its use to humans. In this view, the biotic community and its processes are to be protected from the negative aspects of human activities. Modern proponents of the Ecological Worldview see nature as providing the "opportunity to actualize their own inner spiritual, aesthetic, and moral sensibilities" (Taylor 1992).

While there was, and still is, overlap in these approaches among various segments of the population, it is useful to see how the human/nature relationship has changed over time and that modern views of nature have strong roots in history. It would be interesting to move the clocks ahead and see what historians will call the current era.

Implications of Worldviews in Forestry and Conflict

A key factor in the success of conflict prevention and resolution regarding natural resources-related issues is the ability of forest managers and stakeholders to understand the source of others'—and their own—worldviews and to increase their "intercultural skill set" (e.g., increasing observational skills, listening with empathy, and paraphrasing) (Schauber 2002).

Diverse sub-cultures exist within cultures. The invisible cultural assumptions, norms, values, and beliefs that lie beneath the visible aspects of a culture are the sources of many conflicts. Many of these cultural differences are found in the way that people communicate verbally, such as direct versus indirect, linear versus circular, rational versus emotive, and formal versus informal. Non-verbal communication such as tone of voice, pitch intensity, eye contact, and personal space are also indicators of our cultural differences in norms, values, and beliefs (Schauber 2002).

Western-trained natural resource managers have distinct worldviews, but often do not recognize them as unique (Gannon and Associates 1994).² Assumptions

² Ann Schauber, Extension Diversity Leader, Extension Service, Oregon State University, Corvallis, Oregon; personal communication, July 2002.



influence people subtly, often subconsciously (Gannon and Associates 1994; Kennedy et. al 1998). Schauber dubs these assumptions “cultural no-see ’ems.” Gannon et al. asserts that people are less likely to recognize the uniqueness of their own worldviews when they are surrounded by people of similar cultures. In other words, it is not uncommon for people to assume that others see the world through the same lens if they typically interact only with people from their own cultural backgrounds. Most forest managers in British Columbia receive their training and work in institutions that use western cultural approaches. These approaches are evident in many ways, including the use of linear programming and modelling, forest pest and wildfire eradication programs, and hierarchical organizational structures. These approaches contrast with a perspective of the world as a complex, self-organizing, highly integrated system with “chaos wildcard possibilities” and “fuzzy boundaries.” Likewise, stakeholders often live and work closely with others who hold similar worldviews to their own.

It is also common to assume that one’s culture is the “standard” and all other cultures are “the different ones.” One of the authors overheard a sawmill worker who, when referring to a colleague from a different cultural background, stated, “He used to wear his turban but he finally got his act together and took it off.”

The lack of cultural awareness by some natural resource managers and policy makers has the potential to inadvertently lead to destructive outcomes for local people. For instance, Persoon (1992) reports that rice was introduced to replace sago and taro into the Mentawaiian culture of Indonesia in the 1920s in an effort to improve nutrition, spur agricultural progress, and lighten the workload for women. However, the transition disrupted sociopolitical structures and economic practices, and ultimately led to increased exploitation of natural resources among the communities. Attempts to assimilate First Nations people into the Euro-Canadian economic and social arena by the dominant culture during the last century is, arguably, another example.

Role of Communication Styles in Conflict

Communication is a fundamental component of human relationships (Newstrom and Davis 1997). Culture is often reflected in communication styles. The terminology used by western-trained forest managers, for example, often reflects how they see the world. An example is the cultural assumption behind the word “stewardship.” Users

of this word assume that the role of humans is to care for the earth, which contrasts with other cultures that may see the earth as their mother or caretaker. Foresters may talk about “tree improvement” and mean tree breeding, while those outside the professional forestry culture may either not understand the meaning of the phrase or may find the concept preposterous because they believe that a tree is perfect in its own right and cannot be improved by humans. At a recent meeting in British Columbia, a speaker made the statement, “Our goal is to increase the value of second-growth timber.” In the absence of a modifier for the word “value,” his statement implied that the listeners shared his assumption that “value” referred to financial value, as opposed to recreational or aesthetic value, for instance.

Sometimes the news media promote conflict by using value-laden language. A headline in the *Calgary Herald* newspaper article read: “Where nature is worshipped, humans are sacrificed” (Woiceshyn 2001). Words such as “murder” and “gutting” have been used by some people when describing harvesting (Vining 1992).

Strang (1990) states that, until recently, forestry organizations have lacked effective mechanisms for adequate communications with stakeholders. Hadley (1988) said that forestry communication has historically been directed at changing the audiences’ opinions. She also states that in times of funding cutbacks, communication programs are the first to be discontinued.

Hadley (1988) looks at extension and public education as a solution to many communication problems. She points out that foresters need to know about more than trees; they need skills to work with people and effectively communicate with those who have different worldviews and attitudes than their own (Hadley 1988).

Summary and Recommendations

Public participation is an increasingly integral part of making decisions about natural resources in British Columbia. We have discussed the notion that conflict, as a part of democracy, can lead to better decisions, but we have suggested that understanding culture, worldviews, and communication styles can help forest managers and participating members of the public prevent or mitigate negative consequences of conflict and help promote the best possible decisions. We have reviewed the history of worldviews in the western hemisphere. We discussed how terminology used in natural resource management can often lead to misunderstanding and conflict because individuals interpret words differently through their cultural filters.



Managers and stakeholders can help mitigate conflict in public participation by taking time at the beginning of public functions (such as public advisory board meetings) to acknowledge differences in culture, worldviews, and communication styles. And, if they are not already doing so, curriculum developers at forestry education institutions should consider including cultural awareness training as part of their programs.

Successful public participation begins at a personal level. Both forest managers and stakeholders must become aware of their own cultures, values, and worldviews. They must be aware of how their terminology reflects their cultural assumptions and how their approach either prevents or intensifies conflict. Managers and public participants should clarify what others have said. They must be aware of their tone of voice, speed of talking, and use of jargon that may be misinterpreted by others. For public participation to be successful, forest managers and stakeholders need to learn, understand, and respect the values of others, while remaining open, curious, and willing to listen.

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References

- Adamopoulos, J. 1999. The emergence of cultural patterns of interpersonal behavior. *In* Social psychology and cultural context. John Adamopoulos and Yoshihisa Kashima (editors). Sage Publications, Inc., Thousand Oaks, CA., pp. 63–76.
- Aitken, S.C., S.L. Cutter, K.E. Foote, and J.L. Sell. 1989. Environmental perception and behavioral geography. *In* Geography in America. G.L. Gaile and C.J. Wilmott (editors). Merrill Publishing Co., Columbus, OH, pp. 218–238.
- Arcury, T. and E. Christianson. 1990. Environmental worldview in response to environmental problems: Kentucky 1984 and 1988 compared. *Environment and Behavior* 22(3):387–407.
- Bengston, D. 1994. Changing forest values and ecosystem management. *Society and Natural Resources* 7(6):515–533.
- Bergstrom, J. and K. Cordell, editors. 1999. Integrating social sciences with ecosystem management: human dimensions in assessment, policy and management. Sagamore Publishing, Champaign, Ill.
- Buss, D. and K. Craik. 1983. Contemporary worldviews: personal and policy implications. *Journal of Applied Social Psychology* 13(3):259–280.
- Commission on Resources and Environment. 1995. The provincial land use strategy: volume 4, dispute resolution. Victoria, BC.
- Dearden, P. and B. Mitchell. 1998. Environmental change and challenge: a Canadian perspective. Oxford University Press, Toronto, ON.
- Downs, R. 1981. Maps and metaphors. *The Professional Geographer* 33(3):287–293.
- Duffy, D. and M. Roseland. 1996. A preliminary assessment of shared decision-making in land use and natural resource planning. *Environments* 23(2):1–16.
- Feldman, J. 1999. Four questions about human social behavior. *In* Social psychology and cultural context. John Adamopoulos and Yoshihisa Kashima (editors). Sage Publications, Inc., Thousand Oaks, CA., pp. 43–62.
- Gannon, M.J. and Associates. 1994. Understanding global cultures, metaphorical journeys through 17 countries. Sage Publications, Inc., Thousand Oaks, CA.
- Golledge, R. and R. Stimson. 1997. Spatial behavior: a geographic perspective. Guilford Press, New York.
- Government of Canada. 1990. Canada's green plan in brief: a summary of Canada's green plan for a healthy environment. Ottawa, ON.
- Hadley, M.J. 1988. Extension forestry: the second bridge. *The Forestry Chronicle* 64(3):203–207.
- Hamilton, G. 2001. West coast loggers off to 'finishing school': workers are being trained to talk to protesters rather than pick a fight. *The Ottawa Citizen*, final edition, January 16, p. D3.
- Jones, W.T. 1972. Worldviews: their nature and their function. *Current Anthropology* 13(1):79–109.
- Kalu, O. 2001. The sacred egg: worldview, ecology and development in West Africa. *In* Indigenous traditions and ecology: the interbeing of cosmology and community. John A. Grim (editor). Harvard University Press, Cambridge, MA, pp. 225–248.



- Kearney, A. and G. Bradley. 1998. Human dimensions of forest management: an empirical study of stakeholder perspectives. *Urban Ecosystems* 2:5–16.
- Kennedy, J., M. Dombeck, and N. Koch. 1998. Values, beliefs, and management of public forest in the western world at the close of the 20th century. *In* Proceedings of the second biennial congress on university education in natural resources, March 7–10, 1998, Utah State University. Unasylva 49:1.
- Lee, R. 2000. Values. *In* Dictionary of human geography, 4th edition. R.J. Johnston, D. Gregory, G. Pratt, and M. Watts (editors). Blackwell Publishers, Malden, MA and Oxford, UK, p. 886.
- Levinson, D. 1995. Human environments: a cross-cultural encyclopedia. ABC-CLIO, Santa Barbara, CA.
- Library of Congress. 2002. Chronology of selected events in the development of the American conservation movement, 1847–1920. Part of American memory: the evolution of the conservation movement, 1850–1920. Washington, DC. Online source, <http://lcweb2.loc.gov/ammem/amrvhtml/cnchron1.html>, accessed 3 October 2002.
- Maser, C. 1996. Resolving environmental conflict: towards sustainable community development. St. Lucie Press, Delray Beach, FL.
- Newstrom, John W. and K. Davis. 1997. Organizational behavior: human behavior at work, 10th Edition. McGraw-Hill Companies Inc., New York.
- Persoon, G. 1992. From sago to rice: changes in cultivation in Siberut, Indonesia. *In* Bush base: forest farm—culture, environment and development. Elisabeth Croll and David Parkin (editors). Routledge, New York, NY and London, UK, pp. 187–199.
- Peters, E. and P. Slovic. 1996. The role of affect and worldviews as orienting dispositions in the perception and acceptance of nuclear power. *J. of Applied Social Psychology* 26(16):1427–1453.
- Saskatchewan Round Table on Environment and Economy. 1992. Conservation strategy for sustainable development in Saskatchewan. The Round Table, Regina, SK.
- Schauber, A. 2002. Working with differences in communities: a handbook for those who care about creating inclusive communities. Oregon State University Extension, Corvallis, OR.
- Schwartz, S. 1992. Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries. *In* Advances in Experimental Social Psychology 25:1–65. M.P. Zanna (editor). Academic Press, San Diego, CA.
- Strang, R.M. 1990. Forestry management and education. *The Forestry Chronicle* 66(4):344–345.
- Taylor, D.M. 1992. Disagreeing on the basics: environmental debates reflect competing world views. *Alternatives* 18(3):26–33.
- Tuan, Y.F. 1974. Topophilia: a study of environmental perception, attitudes, and values. Prentice-Hall, Englewood, NJ.
- Vining, J. 1992. Environmental emotions and decisions: a comparison of the responses and expectations of forest managers, an environmental group, and the public. *Environment and Behavior* 24(1):3–34.
- Woiceshyn, G. 2001. Where nature is worshipped, humans are sacrificed. *Calgary Herald*, final edition, August 11, OS07.

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