

Water Development and Spiritual Values in Western and Indigenous Societies

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Summary: The spiritual connection to water that indigenous societies maintain as an integral aspect of their culture is a basis for countless water conflicts with outside, predominantly Western forces of development. While Western cultural values do give some attention to a spiritual dimension of water, it is very much a minority view. The dominant value system determining how water is utilized in Western culture is basically an economic one. In indigenous societies the situation is reversed. The dominant cultural perspective places great importance on spiritual aspects of water and water bodies. Internal debates revolving around development options nonetheless often reflect economic considerations promoted by the outside dominant society. More explicit understanding of indigenous value systems by the Western world would help relieve cultural pressure on indigenous societies, and, to the extent the West might emulate indigenous notions of humanity's role vis a vis nature, could benefit the cause of sustainable development worldwide.

Do indigenous perspectives on water represent a type of spirituality that is absent from Western societies, or are they fundamentally similar? This paper explores the nature of water and spirituality in the "West" as contrasted to indigenous societies.² Two interconnected arguments are put forth in this paper. The first is that western views on water reflect significantly distinct values which contrast, and clash, with indigenous value systems; while there are spiritual traditions within Western society that resonate with indigenous values about nature (and hence, water), these Western spiritual traditions identify less completely with Nature, and externalize a deity that is seen as separate from Nature. The second argument is that even the more naturalistic themes that are found in Western religions occupy minority positions within Western society. By culturally relegating the spirituality of nature to that of a minority tradition, Western society has set the stage for economic exploitation of water and other natural resources, without the environmental restraints attached to a more dominant spiritual perspective.

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² The "West" refers in this paper to the industrialized, co-called "developed" countries, whose center of gravity is in North America and Europe (the geographic "west") but which also include many Eastern countries (e.g., Japan, Korea). I use the term even to refer to many so-called "developing" countries which are embarking on a materialistic development path borrowed from the West, including China, India, Brazil and the economic elite of most developing countries. .

While these two arguments may sound like familiar criticisms of Western society, my intention is not to criticize so much as to suggest some constructive implications, namely that indigenous societies have much to teach us about the profound religious and philosophical relationship of man and nature, as well as about the practical relationship of human societies with natural ecosystems. Indigenous views about water are much more than cultural curiosities that add an interesting dimension to international discussions of water. Indigenous perspectives about water are simultaneously a warning and an insight that can help us all – together – to find a development path that is environmentally sustainable.

The Western Cultural Theory of Water

Let me begin this section by asking the reader's indulgence in my choice of terminology. I am trying to capture broad meanings and this requires broad categories to which the perceptive reader can find many exceptions. The category of the West has been noted (see footnote above), and my claim that there is such a thing as western culture is perhaps easily challenged. And even if there is such a culture, does it have a theory about water? On this point, I will simply assert that there are broadly-held assumptions in Western culture about what water is, and what water is not, and for simplicity I refer to these assumptions as a cultural theory of water.

Water, in Western cultural theory, is a resource. It is not alive; it is inert; it can be fully defined in terms of its physical properties. It has no consciousness, and it has no life. It is neither plant nor animal; it is a type of mineral, a liquid one (usually) but very much a mineral. It has no value in itself, but has great potential value in being applied to some productive purpose. There is no benefit from water's existence other than the extent to which humans can benefit, directly or indirectly, from the water itself, or the environments that water supports (e.g., stocks of food fish that depend on the viability of a lake ecosystem). Water is a resource much like coal or oil or phosphate or gold. It is not only culturally permitted, but actually culturally preferred to make use of the resource by mining it, or recovering it in whatever way is technologically feasible. Choosing not to recover the resource, electing to not utilize the potential benefits of the resource, is considered to be wasteful and in this sense, even sinful.

The environment within which water is found is also a resource which can be utilized for productive benefit. Recent views about the water environment have changed to accord greater economic value to the environmental services of the ecosystems that water supports – for example a riverine environment that includes fish, birds, wildlife, wetlands and the associated plants and micro-organisms, etc. This recent appreciation of the biological aspects of river systems, and the associated economic benefits of water ecosystems, has led to reconsiderations about the desirability of water diversions for irrigation, and reanalysis of the costs and benefits of hydro-power dams. But while the equations have changed with the new values accorded to biological and ecological

factors, the cultural theory underlying the equations has stayed the same: The value of water is defined in economic terms.³

Minority Views on Water within Western Culture

Western culture masks many minority voices which provide richness and depth to the total cultural experience. The bubbling of minority discourse also serves to define the position of the dominant culture by constantly challenging it and forcing clarification and sometimes successfully injecting reforms into the dominant position. Within the contemporary Western discourse about water, there is a lively debate about the extent to which water is an economic good vs. a social good. The World Bank, for example, calls for borrowing countries to treat water as an economic good, that can be bought and sold, and that has economic value (measured in monetary terms). Against this dominant view is the liberal minority perspective that water is a social good that is necessary for survival, and should be made available to all. This debate between pure economic valuation and that of a blended economic plus social valuation, constitutes much of the policy discourse about water. Other minority views, particularly spiritual ones, can also be found within Western society, but these have little chance of gaining serious attention when the focus is on the battle between the proponents of economic thinking versus those of more social thinking.

Historically there is a long tradition of environmental spirituality within Western culture which has always remained safely marginalized from the mainstream. The followers of St. Francis of Assisi fit into this category. In the United States, the 19th Century Transcendentalist writers, notably Henry David Thoreau and Ralph Waldo Emerson, articulated a spiritual interpretation of the natural world. The reaction of mainstream American society to spiritual interpretations of nature was to treat these as metaphors, without acknowledging a true spiritual aspect of nature. The virgin pine forests of Wisconsin were awe-inspiring ecosystems reminiscent of European cathedrals, perhaps, but were not accorded the status of sacred places in the eyes of the 19th Century white settlers who encountered them. Nor were the streams and rivers – which were abundant with fish and supported complex array of wildlife – considered sacred to these White settlers. Clear-cutting the forests and upsetting the hydrology of the streams was a sort of manifest destiny that took on a sense of religious duty. Today the only patch of forest in the state of Wisconsin that has not been clear-cut is the reservation land of the Menominee Indians (Davis 2000). The streams running through these lands still contain some fish, but they can be eaten only sparingly to avoid build-up of dangerous carcinogens, the result of 20th Century industrial development.

Contemporary calls for a new environmental ethic have received little attention in the rush for economic exploitation of natural resources. Compared with indigenous spirituality, the Western ethical approach to nature is an emasculated form of spirituality,

³ Economic analysis can include "non-economic" variables such as landscape value, cultural heritage value, and even religious value, but only if they can be reduced to a common currency which, in economic analysis, is monetary. This type of analysis has been applied to the multi-functional benefits of agriculture and the same approach could be applied to multi-functional benefits of water.

having a moral authority but lacking a religious one. The religious authority that is part of Western culture – in the form of the Catholic, Protestant, and Jewish religions – lacks a credible environmental message. Indeed, Christianity is often cited as being part of the problem (e.g., White 1967). Efforts are being made, however, to promote a new environmental ethic not only inside organized religions, but also outside the Church through an environmental ethos rooted in various traditions, including 19th Century American transcendentalism. For example, the National Catholic Rural Life Conference (NCRLC) is formulating a “water ethic” that seeks to respond to the appeal of Pope John Paul II for Catholics to undergo an “ecological conversion”, a moral call to protect the environment and make the earth a place where all life is valued and can grow in harmony (Kautza and Grontsky 2003).

The Earth Charter initiative promotes an environmental ethic that reveres water bodies as intrinsically important independent from their economic value to people.⁴ The Charter reflects diverse traditions, both religious and secular, brought together in a consensus statement that avoids spiritual assertions to render it palatable to believers of any faith, as well as atheists. The moral imperative is to honor the earth as our mother, which can be interpreted religiously, or through evolutionary rationality in the sense that human life, as well as all other life, has derived from a family tree originating with the earth itself. The Earth Charter seeks to use this kinship between people and the earth as a moral basis for protecting the earth's natural resources.

In both Christianity and within the environmental movement there are strong currents of kinship with the earth, and a spiritual perspective on the nature of water itself. While water is not viewed as a form of life, it is viewed as something sacred, in the sense that it is a basis for life, and it is a major shareholder in the stock of earth's resources. To the extent that the earth itself is sacred, then water too is sacred.

If Western culture contains these sacred views of water, then why is water so abused in practice? There are two parts to this answer: (1) The spiritual message about water is a qualified one that does not explicitly acknowledge water or water bodies as having a spirit quality; rather, water is sacred through a logical framework of the earth and all creation as representing a sacred trust from God (Christianity) or from evolutionary history (Earth Charter). The spiritual message, in other words, is muted; it is there, but it is weak. Secondly (2) the spiritual perspective about the environment (including water), even in this muted form, is very much a minority voice within Western culture, and even within Western religions. The mainstream religious expressions within the United States, for example, view water as a secular commodity that can be exploited without religious or moral compunctions. Proponents of environmental ethics represent minorities within the organized religions of the West, as well as within Western society generally.

Case Study: The Silvery Minnow. The Rio Grande River, which forms much of the border between the United States and Mexico, has become intermittently dry in parts of its upper basin in the American state of New Mexico, because of diversions for agriculture and urban/industrial use. All the waters of the river are legally owned by the

⁴ The text of the Earth Charter is available at www.earthcharter.org.

various water users – farmers, private companies, and municipalities – and the federal government has constructed a network of dams to regulate the flow and ensure that water is available to the owners. Not only is there no water allocated to environmental flows, but the water is actually over-subscribed and is supplemented by an inter-basin diversion from the adjacent Colorado River system.

The fact that a major river has gone dry due to water diversions caused no particular alarm until environmental groups brought suit to force the federal government to release water stored in the dams in order to provide an environmental flow. The legal basis for the suit was to protect an endangered species of small fish, the silvery minnow, whose habitat coincided with the stretch of river that had become dry. Under environmental laws already in place, water withdrawals from federal projects were not allowed to endanger the survival of a fish (or plant) species. The initial outcome of the legal action was a court order instructing the concerned government agency (the Bureau of Reclamation) to release water for preserving the fish habitat even if it meant cutting contract-water deliveries to farmers and municipalities. This legal decision was quickly circumvented by political action in the federal Congress, where both the Republican and Democratic party senators from New Mexico joined forces to push for an exemption in the federal Endangered Species Act. The final⁵ result is an attachment to a Congressional bill that expressly forbids the government agencies controlling the Rio Grande water to reduce allocations to water rights holders (the various municipalities, farmers, industry, etc) for the purpose of saving the habitat of the Silvery Minnow.

What cultural values are being expressed in the Silvery Minnow debate? Private ownership rights to water are viewed as sacrosanct – literally sacred – so long as there is water which can be diverted. The survival of the silvery minnow, and the health of the riverine habitat are also seen as important, but these concerns cannot match the greater priority of meeting the water commitments made to legally recognized water customers. The Mayor of Albuquerque, the largest city along the upper Rio Grande, was enthusiastic at hearing the news that the city's water allowances would not be cut to create an environmental flow for the Minnow. "I'm a very happy mayor this afternoon," he said, "All of Albuquerque should be dancing in the street."⁶ Water for nature is seen as a luxury to be addressed only after the human customers have been fully served.

Water and Spirituality in Indigenous Societies

For indigenous societies, the natural, *spiritual* connections linking humans, water, fish, and the river itself preclude the option of placing human desires for an unreduced quota of water ahead of nature's needs. In contrast to Western culture, the indigenous spiritual perspective of the environment is clearly articulated and directly experienced. It also provides a more dominant "voice" within the society, than is the case in the West. The

⁵ In water conflicts, nothing seems to be "final" but this is the situation as of November 2003.

⁶ Taken from the on-line edition of the newspaper, *The Santa Fe New Mexican*, 7 November 2003 (www.santafenewmexican.com)..

introductory words of the Indigenous Peoples' Water Declaration⁷ very clearly demonstrate the identification that indigenous spirituality makes between people and Nature:

1. We, the Indigenous Peoples from all parts of the world assembled here, reaffirm our relationship to Mother Earth and responsibility to future generations to raise our voices in solidarity to speak for the protection of water. We were placed in a sacred manner on this earth, each in our own sacred and traditional lands and territories to care for all of creation and to care for water.
2. We recognize, honor and respect water as sacred and sustains all life. Our traditional knowledge, laws and ways of life teach us to be responsible in caring for this sacred gift that connects all life.
3. Our relationship with our lands, territories and water is the fundamental physical cultural and spiritual basis for our existence. This relationship to our Mother Earth requires us to conserve our freshwaters and oceans for the survival of present and future generations...

Water is not only an aspect of Indigenous spirituality but a very major component of that spiritual world. Water, whether as a substance, or in the form of water bodies (rivers, lakes) and meteorological phenomena (rain, snow, fog, clouds), are seen through a spiritual – not an economic – lens. Water is not viewed as a way of making money any more than children are seen as sources of revenue. Money can, of course, be derived from the labor of children, and from water projects, but this is not the dominant motivation for having children, or for protecting water. The spiritual perspective of indigenous people is one that is challenging for Westerners to appreciate, given our own peculiar cultural perspectives as outlined above.

But if indigenous people view water as such an important spiritual aspect of life, then how is this reflected in actual decisions they make about water development? When money is at stake, are these spiritual values strong enough to over-ride the monetary values? Does water development within indigenous territories reflect the values articulated in the Indigenous Declaration on Water? This question is not entirely fair, since indigenous societies are normally in a position of political disadvantage via a vis a dominant society which seeks to impose, even with good intentions, its own value system which is generally Western in its broad features.

Water development projects within Indigenous areas typically are forced on the indigenous communities by outside forces of government and/or private industry. Many of the papers in this present volume document cases of outside political, economic, and even military pressure on indigenous communities to force particular forms of water-related development. Perhaps the most familiar examples of forced development are

⁷The full text of the Declaration, which was drafted by indigenous participants at the 3rd World Water Forum in Kyoto, Japan, in March 2003, is available at www.indigenouswater.org.

hydro-power dams build on indigenous lands for the purpose of exporting power to non-indigenous areas. The injustices of dam development have been carefully documented by the recent World Commission on Dams, and recommendations adopted for empowering indigenous communities regarding dam-related development decisions.⁸

But what about cases of indigenously controlled development, where indigenous communities themselves decide whether and how water development will occur? When indigenous communities themselves are in charge, do spiritual values become evident in the decisions made about water development? Here we encounter complexities of meaning and debates about assigning responsibility for water development decisions. If an indigenous community agrees to allow a dam to be constructed that forever alters the riverine environment which has nourished that community for generations, is this an example of free decision-making? Was the decision made by the entire community or by a political minority that has usurped control? Did spiritual values about the river enter the decision-making process? When confronted with actual cases where indigenous communities have literally sold their natural resources to outside developers, it is easy to presume that spiritual values are really superficial, and that money has far greater power than spiritual considerations. Do indigenous societies really hold the spiritual values that their leaders claim? Or are these values only tools for political negotiations and international statements?

The Case of Black Mesa (Arizona, USA) The Peabody coal mine that straddles the tribal lands of the Hopi and the Navajo in the high arid plateau of northern Arizona, has a contract with the Hopi tribal government, to extract pristine groundwater for its mining operations. The water is mixed with the coal to form a slurry which is conveyed by an open aqueduct nearly 400 kms to an electrical generating plant serving the cities of southern California. The contract allows Peabody Energy (a subsidiary of Lehman Brothers) to pump water from an aquifer which feeds the springs and few streams that comprise the sole source of water – other than infrequent rainfall -- for the entire Hopi tribe, and for the Navajo communities in the vicinity. As a result of the pumping, which has gone on since the 1960s, the Hopi streams are starting to dry up, and the ceremonies that have always been integral to Hopi religion can no longer be performed. It is possible (though expensive) to bring drinking water in by truck, but the religious base of the tribe is now at risk of being permanently lost.

How has the Hopi tribal government allowed this to happen? There is, of course, a history. The tribal government is a relatively recent (1947) creation, imposed by the federal Bureau of Indian Affairs (BIA) partly for the purpose of having a convenient body to consent to a coal mine lease. There are legal barriers to breaking the contract and stopping the mine, and most importantly, there are financial considerations. The vast majority of the tribal government's budget derives from the royalties and fees collected annually from Peabody. The tribal council is not in favor of rescinding the contract, apparently for this financial reason. And what of the spiritual considerations? Both the springs and Black Mesa itself, have always been considered sacred to the Hopi, and yet

⁸ The report of the World Commission on Dams was released in November 2000 and is available for download at www.dams.org.

here is a Hopi tribal council which votes to continue the contract in exchange for its operating budget. Has the Hopi tribe sold its spirituality to the coal mine?

If we analyze the Black Mesa case in terms of outcomes – the coal mine is operating with the consent of the Hopi government – then we could say that spirituality has lost out to financial pressures. But if we look at the process by which this outcome has resulted, then we see a different picture of spiritual values. There is strong opposition to the mine within the Hopi communities; indeed, there is suspicion of the tribal government itself, seen by traditionalists as colonial tampering with traditional Hopi institutions. Hopi opposition to the mine is formalized in Black Mesa Trust⁹, an organization dedicated to the preservation of the water supplies that the Peabody coal mine is depleting. The organization is headed by a formal tribal chairman who has changed his own views about the mine since leaving office, and who has galvanized many Hopi to speak out.

The approach of Black Mesa Trust is to appeal to people's spiritual values about water in general, and particularly the sacred springs which are now going dry from over-pumping by the mining company. The argument is not based on economics (although the argument could be made that the tribe's contract with Peabody coal drastically underprices the water), nor is it based primarily on environmental considerations (though the deterioration of the aquifer is an important concern). The message of Black Mesa Trust is primarily spiritual and cultural: the sacred springs are suffering just as the language is suffering. The next generation is in danger of being left without Hopi water and without Hopi language. This message resonates with the Hopi people because their spiritual view of water remains largely intact. They are losing their water, but not their values.

Comparing Western and Indigenous Spirituality about Water

Indigenous societies, in general, hold spiritual values about water that are not found in the mainstream of western culture. In the discussion above, I have tried to show that western culture does contain some minority views about the spirituality of water, but these views do not shape real decisions about how water is used. Rivers are protected in the West only where there is an economic reason to protect them. Even Western environmental movements subscribe to economic values. In IUCN's recent publication about the importance of environmental flows (Dyson et al 2003), for example, the rationale presented is based purely on economics – environmental economics to be sure – but without any appeal to spiritual or even aesthetic argumentation.

Indigenous societies, in contrast, invariably view water and water bodies as spiritual phenomena. They might fail to protect those water bodies from external forces, and even from internal forces, but such failures should not be misinterpreted necessarily as failures of *values*; rather these are more likely to represent *political* failures. For most members of indigenous society, their spiritual values about water are still very much intact. It is the minority voices of secularism within indigenous societies which find powerful friends

⁹ For details about Black Mesa Trust, see their website: www.blackmesatrust.org.

among outsiders with vested interests in exploiting indigenous water resources. These are the forces that drive water development in indigenous areas.

It has been the presumption of both outside water experts as well as the more secular members of indigenous societies, that Western-style water development has much to teach indigenous societies. The future of indigenous societies, according to this view, will be the adoption of Western approaches. Certainly history points in this direction; that indigenous values will eventually fall in line with the Western values, as Western technology dominates the world scene. Yet Western technology is not doing very well with managing water. The long-term prognosis for the world's water suggests that an accommodation needs to be made with the environment in the interests of long-term food production.

Does indigenous spirituality about water have a future? Is it destined to succumb to Western concepts of secular rationality? There are many reasons to suggest that indigenous value systems do indeed have a future, and that as alternatives to Western culture become fewer and fewer, the importance of value diversity is also becoming more appreciated both inside and outside indigenous societies (Groenfeldt 2003). Within indigenous societies, this process is one of cultural revitalization. From the outside, i.e., from the Western perspective, an appreciation of indigenous values comes from education. This was the basic intention of UNESCO's co-sponsorship at the 3rd World Water Forum, of the sessions on Water and Cultural Diversity.

Western appreciation of cultural diversity about water, however, needs to go beyond the level of, for example, appreciating tribal art in a Paris gallery, to one of *respecting* a society's cultural *right* to a diversity of thought and values. It is the lack of genuine respect for cultural diversity that lies at the foundation of many controversies about water development. Does the US Bureau of Indian Affairs respect the Hopi view of their springs as sacred places? Did Hydro-Quebec respect the Cree view of the animals they hunted as sacred beings? Does the World Bank respect indigenous views of sacred river spirits? It is probably safe to say that a position of "appreciation" of indigenous spirituality is easier for Westerners to adopt than is genuine "respect". *Appreciation* of the river spirit means that the dam can still be built, while *respect* for the spirit implies that dam might not be built.

The differences between Western views on water and the more spiritual, indigenous values about water suggest great potential for conflict, but, with education, there can also be cooperation. The emerging Western approach to water management that accords greater economic value to healthy aquatic ecosystems offers particular reason for hope. The European Union's recently adopted Water Framework Directive, for example, requires restoration and maintenance of riparian habitats. The survival of the Silvery Minnow would be assured if the state of New Mexico adopted the same policies. By agreeing on the importance of healthy water ecosystems, a major potential for value-based conflicts can be reduced.

The purpose of learning more about indigenous spirituality of water goes beyond environmental strategies, however. The West has much to learn – or to *relearn* -- from the indigenous view of man's spiritual relationship with the rest of nature. The ethical perspective embedded in indigenous views about nature and water is largely missing from the Western toolkit on water management, and we Westerners need to acquire some ethical tools. It is in everyone's interest that Western society learn from indigenous peoples what it means to feel a kinship with the earth, with the land, and especially, with the water.

References

Davis, Thomas, 2000, *Sustaining the forest, the people, and the spirit*. State University of New York Press.

Groenfeldt, David, 2003, *The future of indigenous values: cultural relativism in the face of economic development*. *Futures* 35(9): 917-929.

Dyson, M., Bergkamp, G., Scanlon, J.(eds), 2003, *Flow: the essentials of environmental flows*. IUCN Water and Nature Initiative (www.waterandnature.org).

Kautza, Tim and Robert Gronski, 2003, *A water ethic to renew the earth*. National Catholic Rural Life Conference website (www.ncrlc.com/WaterEthic-RenewEarth.html).

White, Lynn, Jr., 1967, *The historical roots of our ecologic crisis*. *Science* 155, 1203-7.