In recent years, many archaeologists have been drawn to perspectives that break down the divisions between mind and body, thought and action, whether these be phenomenological or inspired by the evolutionary concept of the “extended phenotype,” whereby all aspects of an organism’s behavior and environmental engagements are relevant to its reproductive fitness and survival. These approaches often seek to argue that thought is itself a kind of action, or at least that it is always undertaken by an embodied being in a contingent material context (Ingold 1998; O’Brien and Holland 1995; Thomas 2006). It follows that thinking “about” the landscape is also thinking “in” the landscape and that our physical situation can be said to contribute to our conceptual argumentation. And thinking about landscape is also finding our way through the landscape.

In this section, the authors are concerned both with the ways that we as modern-day archaeologists conceptualize past landscapes and with the understanding of landscape on the part of Indigenous dwellers, past and present. One hopes that there is a potential for the former to be informed by the latter, so that our archaeology does not remain railroaded to a single, more or less narrow Western frame of reference, and rather can become more aware of the many ways that people find themselves in the midst of their worlds and make sense of them.

Thinking about landscape explicitly or implicitly embraces cosmology and its concerns with materials, substances, spirits, and mortals. The landscape itself is the totality that links all these elements. When people engage in some action in the world, they often consider themselves to be operating on some part of a greater whole, just as archaeologists try to make their observations meaningful by putting them into the framework of landscape. The landscape is also the physical context for the circulation of objects in exchange from person to person, the circulation of livestock between pastures, and the circulation of persons between dwellings and task-places. Thinking about landscape requires that we recognize the complementarity of physical movement and inhabitation to cosmology. This recognition means that there is no distinction between the physical world “as it is” and the world-as-cognized: people inhabit and move through the landscape of understanding and experience.

Moreover, thinking about landscape involves the ways in which people divide the world into territories and zones, culturally regulated spaces appropriate for particular kinds of conduct, associated with particular beings, or reserved for particular communities. Historically, they have done this in a variety of ways, one being understanding landscape in the
abstract as property that can be negotiated and contested, bought and sold.

References


In recent years, water has become an important topic in landscape archaeology and anthropology. As an integral part of every landscape, however arid, water is literally essential to human existence and to all human-environmental engagements. As water issues have become increasingly urgent in many parts of the world, concerns have risen about the sustainability of many forms of land-use, and conflicts over water resources have increased. There is a pressing need for a fuller understanding of the social and environmental consequences of these problems.

Because water is the “lifeblood” of all organic organisms and essential to every form of material production, the ownership and control of water resources is often presented as the quintessential symbol of enfranchisement, fundamental to democracy and to the ethical distribution of resources. In the social sciences, there has been a long-term interest in the politics of water, reflecting its potential to confer power and influence on particular groups (Holmberg 1952; Orlove 2002; Strang In press; Wittfogel 1957; Worster 1992) and to play a central role in political and moral economies (Bennett 1995; Blatter and Ingram 2001; Lowi 1993; Ward 2003).

An understanding of the relationship between social and environmental change is provided by ethnohistories focused on the use and management of major rivers such as the Columbia (Golay 2003; Meinig 1968; Worster 2001), the Mississippi (Harvey 2004), and the Colorado (Nye 1999). There is some overlap with research concerned with development and environmental issues that, in relation to water, have focused on the “taming” of “wild” rivers (Harden 1996; Pearson 2002; Ulrich 1999) and the social and ecological effects of vast river engineering projects, such as the building of major dams, in the United States (Evenden 2004; Khagram 2004; Nye 1999; Scarpino 1999) and more recently in China, where the damming of the Yangtze River has had an extreme impact on its dependent ecosystems and on the riparian communities dispossessed of their homes and lands (see Barber and Ryder 1993; Priyanka 2004). Clearly, as Leif Ohlsson, points out (1995), conflicts over water are a major development constraint. There is now growing concern about the effects of widespread over-irrigation; for example, in the United States, massive efforts to “green” the western deserts have had little success and have produced major environmental degradation (see Reisner 2001 [1986]). In Australia, a cautionary example is provided by the Murray-Darling basin, where irrigation has led to critical water shortages, the loss of numerous aquatic species, and the salination of large areas of land. This situation has placed considerable social and
economic pressure on its farming community, leading to intense competition for water allocations and leaving many small farmers unable to maintain their way of life. It has also heightened tensions between rural and urban communities, since the latter are seen to sympathize with the environmental movement’s increasingly vocal critique of farmers’ land and water management.

As conflicts over water escalate and environmental problems become more extreme, social scientists must get “under the surface” of the issues. Clearly all engagements with water entail the material enactment of particular ideas: about human relationships with the environment; about who (or what) should have water; and about how water should be used and managed. It is visions of development, growth, and empowerment that drive major infrastructural endeavors and lead to contests over control; and it is the beliefs and values of water users, and the meanings that they encode in water, that direct everyday practices. There is excellent potential, in social archaeology, for researchers to consider the materialization of these ideas and processes, as they are expressed both in artifacts and in cultural landscapes (see Allen, Hey, and Miles 1997).

**Fluid Metaphors**

Water is also of interest at a theoretical level. Many of the issues surrounding it recur in diverse cultural contexts, enabling fruitful ethnographic comparisons. The cross-cultural commonality in the themes of meaning encoded in water raises key questions about universalities in human experience. This is particularly relevant, for example, in considering sensory and cognitive processes and their influence on cultural ideas and practices (see Bloch 1998; Strang 2005a; Strang and Garner 2006).

Theoretical models are inevitably reliant on metaphors, and a focus on water has gained relevance as theory in the social sciences has become more appreciative of the fluid nature of human and nonhuman processes of change and adaptation. In both archaeology and anthropology there has been a move away from rooted, land-based analyses of economic and political practices to a more phenomenological and processual view, encompassing shifting “fluidscapes” of identities and experiences.

Water provides vast imaginative potential to carry cultural meanings (see Douglas 1973). Illich observes that “water has a nearly unlimited ability to carry metaphors” (1986: 24; also Bachelard 1942; Lakoff and Johnson 1980), and as I have [Water’s] characteristics of transmutability and fluidity make it the perfect analogue for describing complex ideas about change, transformation, mood and movement. Because it can transform from one extreme to another it can readily convey all of the binary oppositions through which people construct meanings and values. Of all the elements in the environment, it is the most suited to convey meaning in every aspect of human life. (2004a: 61)

The “flow” of water is regularly employed, for example, to articulate ideas about time and the spiritual progression of human lives. Concepts of time are culturally specific, ranging from circular visions of local movement (for example, the human spirit emerging and returning to a spiritual home in Aboriginal landscapes [see Allen 1997; Barber 2005; Langton 2006; Magowan 2001; Strang 2002]) to metaphorical ideas about journeys downriver/through life to “the great sink” of the sea, and to larger and abstract concepts of temporal movement, linked with vast hydrological cycles (see Tuan 1968).

The use of water to imagine spiritual being and time leads to its widespread use in religious rituals (see Eliade 1958; Rothenburg and Ulvaeus 2001; Strang 2004a; Wild 1981) to signify social and spiritual “congregation” (see Daniélou 1961; Davies 1994; Pocknee 1967; Schmemann 1976), processes of transformation (Somé 1994), and the generation of life itself (e.g., Furst 1989; Merlan 1998; Taco, Wilson, and Chippindale 1996). Concurrent with concepts of spiritual, social, and moral well-being come many ideas about physical health and balance. Visions of “nature” in harmony, or “healthy” flows in ecosystems, match more immediate concepts of human physical health as a matter of “proper” circulation and flow (Giblett 1996; Strang 2004a). Associations between water and health are multiple, ranging from the practical and social (e.g., Astrup 1993; Goubert 1986; Shove 2003) to more spiritually orientated concepts of health, cleanliness, and morality (e.g., Anderson and Tabb 2002; Forty 1986).

Awareness that water is the most vital “substance” of the self, as well as encouraging associations between spiritual, social, and physical well-being, provides powerful metaphors about human identity. An important aspect of human “being in the world” is the sense of the self as a physical being, composed of particular substances that have a definable identity (e.g., Caplan 1997; Fischler 1988; Lupton 1996; Magowan 2001; Strang 2002, 2005a). Thus, discourses
heavily reliant on fluid metaphors about blood and the potential for purity to be adulterated by otherness: a cross-cultural concept of pollution that has long been of interest in anthropology (Douglas 1966; Strang 2004b [2001]). This notion of pollution also links with religious notions of social and spiritual identity and the potential for its (social and moral) purity to be compromised or adulterated.

Alongside ideas about "substance" or "essence" lies a reality that human engagements with water involve intense sensory experiences: thirst, its relief and the taste of water; the pleasures of bathing, and the excitement or restfulness of immersion; the seductive sounds of water; and the mesmeric effects of gazing on its glittering surfaces (e.g., Damasio 1999; Feld 1982, 1996; Strang and Garner 2006; Gell 1992; Howes 1991, 2003; Sprawson 1992; Stoller 1989; Strang 2005b). All these experiences offer stimuli that have real physiological effects and, more importantly, generate ideas about water that are highly imaginative and influential. "Being-in-place" in and around water engenders affective responses that are commonly spiritual or aesthetic in their nature. In concert with the particular qualities of water—its constant circulation through the environment and the body; its visual fluidity and numinous shimmer—these responses encourage the location of particular meanings in water that are specifically cultural but also readily comparable cross-culturally. Water appears as a life-containing element: for example, as the pool of ancestral force that generates Australian Aboriginal spirit children; as the substance of "supernatural potency" that raises the dead in Kwakiutl mythology; and as the "living water" that carries the Holy Spirit in the Christian cosmos.

Water is thus the most vital of substances. It is the most essential element for survival, health, and wealth; the inspiration for metaphors of life, time, movement, and transformation; the source of powerful sensory and aesthetic experiences; and the fluid of social and spiritual identity. Imbued with such powerful meanings, water bodies—of any kind—unsurprisingly tend to be among the most important elements in every cultural landscape/fluxspace.

**Locating Water**

Water is never entirely still: even captured and contained, it shimmers and transforms itself from one form to another. Locating it in a cultural fluxspace is equally elusive, forcing us to approach the task from a phenomenological perspective that is political, and religious dynamics of a particular cultural frame and the relationship between these and a local ecological context. From the perspective of landscape archaeology, it is especially relevant to consider the more materially "concrete" aspects of that environment through which water is controlled, distributed, managed, and used.

There are some recent ethnographic forays into this kind of approach. Lansing's influential analysis of the relationship between religious beliefs and practices and the management of irrigation in Bali (1991) was useful in highlighting the multiplicity of engagements that people have with water and how these act on one another. Other work has stressed the importance of a holistic analysis of the way that water permeates all aspects of culture, both ideationally and in material terms (see Lansing, Lansing, and Erazo 1998; Mosse 2003; Rigg 1992; Strang 2004a; Toussaint, Sullivan, and Yu 2005). Some recent ethnographic research in the south of England maps a particular waterscape (Strang 2004) that bears mention here.

**The Stour Valley**

The Stour River, in Dorset, runs for about 110 kilometers, through rich farmland and chalk downs, ancient mills and pretty thatched villages, and finally into the growing conurbations on the south coast. Upstream, its population is composed mainly of retirees from London, or relatively wealthy landowners, whereas the younger generations (and the less well-off retirees) congregate in the south, where there are jobs in tourism and light industry, less expensive housing, and the joys of the seaside. The river joins and connects these communities, allowing them to "locate" themselves in relation to it and to each other, while the containing valley further defines its inhabitants as a local community, albeit one that has—as elsewhere in the United Kingdom—become increasingly mobile and transient.

The social and spatial organization of the inhabitants of the valley reflects long-term changes and adaptations that began with Celtic hunter-gatherers and that remained intensely rural through centuries of invasion and settlement by Romans, Saxons, Danes, and Normans. For many centuries, Dorset—and its water supplies—fell under the control of powerful abbeys and manors who disbursed land and water to dependent communities. The River Stour was central to local economic activities, and the Domesday Book records 166 mills along the river. Population growth was steady: during the industrial revolution, the water power that had
production, and (as machines replaced farm labor) many people moved into the towns and cities. In addition to powering a variety of small industries, the river continued to support a shift toward intensification in farming, supplying the “water meadows” of the 16th century and, in subsequent centuries, providing resources for the mechanized irrigation of fodder and arable crops.

With these processes of rural and urban industrialization, the ownership of land and water underwent equally radical changes. Collective forms of property rights, such as the use of “common land,” were supplanted by waves of enclosure, which excluded and disenfranchised the majority of the population. However, the situation was more complicated in relation to water, which had, over the centuries, generally been regarded as a “common good.” There was considerable technological change, as communal wells and village pumps were replaced by a wider infrastructure of bores, pumps, reservoirs, and pipes, particularly in urban areas, but though much of this early supply technology belonged to private water companies, these were small, local, and largely set up by Victorian philanthropists whose aim was to improve the (often poor) health and sanitation of the lower classes. By the early 20th century, most water companies were publicly owned by municipal bodies, and, in a postwar desire for democratization, this collective ownership was broadened and formalized with the nationalization of the water industry in the 1940s. This situation was then reversed, in 1989, with the Thatcher government’s controversial privatization of the water industry, which handed the water treatment and supply infrastructure to large private corporations, over 40% of which are now owned by foreign corporations.

There is a detailed material record of these changes and developments in the local fluid-scape, which also reflects the shifting cosmological perspectives that accompanied each military and ideological invasion, as well as the accelerating drive toward modernity that Dorset shared with the rest of the nation. The holy/healing wells and springs that had provided a focus for rituals and votive offerings in a sentient and polytheistic Celtic landscape were taken over first by the Romans, who imported their own water gods and goddesses and celebratory rituals (such as Fontanalia), and then by Christians, who built churches and fonts over them, celebrated their “miraculous” healing abilities, and renamed them after their saints. Worship of the Mother Goddess and an array of nature Gods were thus replaced by Christian visions of spiritual cleansing.

Part III: Thinking through Landscapes

With the Enlightenment came more secular cosmological explanations that initiated the transformation of water from holy essence to H2O, creating the potential for its commodification as a mere material “resource.” It is this vision that underlies a contemporary idea of water as the “product” of a private water industry, to be abstracted, treated, distributed, and paid for in measured quantities. Although the water industry and successive governments committed to privatization have made strenuous efforts to foreground this vision, it remains, for most people, only a thin overlay of ideas over a vast historical well of beliefs about water as the essence of social and spiritual identity, as a substance that can be compromised both literally and metaphorically, and as the flow of life and life-time. This vision is further challenged by contemporary engagements with water, which provide intense sensory and cognitive experiences and thus continue to generate a stream of meanings and metaphors employing images of water and fluidity.

All these tributaries of thought are readily evident in contemporary Dorset, running alongside one another and mingling as people try to balance spiritual concepts with the pragmatics of everyday life. Neolithic henges, originally positioned in relation to sacred water sources, have become tourist destinations. Although many of the ancient wells have succumbed to modern drainage and are memorialized only in place names and documents, some continue to provide a focus for neo-Pagan well-dressing rituals and historical interest. Many villages retain—even if they no longer rely on—their communal pumps as a visible reminder of highly localized identities. Christian groups use ancient fonts, or in some cases the river itself, to baptize people into their congregations. Ornate Victorian pumphouses provide an abiding testimony to the pride of their philanthropic sponsors, and modern water company employees exhibit with equal pride their technologically sophisticated water and sewage treatment plants.

In Dorset today, as elsewhere in the United Kingdom, the control of water lies in the hands of a small elite, composed of private corporations, regulatory bodies, and wealthy landowners. Although the control of the regulators is less tangible, there is now a sophisticated infrastructure—pipelines, pumps, treatment plants, and so forth—that (though largely controlled now by computers in centralized offices) embeds the owner ship of the water corporations in the material landscape. Some quite large tranches of riparian land along the Stour are also still owned by the local...
and their gracious parklands, gardens, and fountains, along with income from their dependent farms, helps to maintain their status and influence in the pecking order of village life, parish and county councils, and other local organizations. Although, as in other parts of the United Kingdom, there has been a demographic shift off the land into urban centers, villages have not lost their importance as focal points for social events, and this situation has been boosted by the influx of wealthy retirees. Some of these are hopeful newcomers to the water-owning elite, having been able to buy riverside homes and land or ancient watermills where, almost without exception, they direct time and resources toward the construction of lakes, ponds, fountains, and other water features.

Despite the decline of farming in the United Kingdom, the Stour Valley, with its rich soils and kind southerly climate, remains a relatively wealthy farming area in which even tenant farmers can prosper. Farmers have retained their access to water for irrigation, and there has been some reintroduction of the water meadows that enriched the area in the 1700s. However, farmers are not immune from contemporary difficulties in the industry: many small-holdings have been amalgamated, and there are growing complaints about economic pressures—even as farmers are trying to intensify production with more irrigation, their position as water owners has become less secure, with increasing control over abstraction licenses and more competition for resources from water companies focused on more profitable domestic supplies. Similar issues face the small number of riparian industries, mostly dairies and breweries, that rely on reliable access to clean water.

The private ownership of water is challenged at a local level by environmental organizations and community groups, who strive for access to and some measure of control over the river and its tributaries. It is also countered, to some degree, by the wider population of water users, who, even if they no longer own or manage water supplies collectively, and can only visit the prestigious lakes and fountains of the rich, make what water companies describe as “profligate” use of supplies in their own homes. Here, in the small amount of space that individuals and families can still control, water is used to create an aspirational “lifestyle” echoing that of the water owning elites. Thus, householders invest in luxurious bathing facilities and spas, ponds, water features, and green lawns to manifest, in material culture, the flow of their own agency and creative power (see Strang 2004a, 2005c; Symmes 1998).

Chapter 10: The Social Construction of Water


5. Water imagery has also played a central symbolic role in psychological analyses (e.g., Freud 1961; Wittels 1982).

6. A watermeadow is created by the managed flooding of grazing areas near the river, to prevent them from freezing, thus extending the period when the land will produce fodder and enabling farms to support larger herds of cattle.

7. Many rural dwellings in Dorset didn’t get piped water supplies until the 1940s and 1950s, and even after that many remained dependent on individual springs and pumps, and some villages continued to use (and defend) their own local sources of supply.
8. This is a well-dressing ritual involving the decoration of the well-head and the throwing of flowers and other votive offerings into the water. In recent decades, it has been revived in many villages in Britain as a celebration of community life.

9. Richards (1996) observes that water is a crucial element in the architectural layout of henges and argues that “the relationship between henges and rivers provides a metaphorical conjunction between the natural flowing of water and human movement into the monuments” (1996: 313).

10. As Bender’s work on Stonehenge illustrates (1998), there are diverse perspectives on such sites, and their use and management are much contested.

11. The water industry is regulated primarily by the Office of Water Services (OFWAT), whose function is to regulate pricing; the Drinking Water Inspectorate (DWI), which tries to maintain the environment; and the Environment Agency (EA), whose task is to protect the environment.

References


Gell, A. 1992. The technology of enchantment and...
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