32

Environment and culture

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The nature–culture dialectic

Nature is fate, culture is destiny. Nature is the condition of our material existence, culture is our only means of encountering and re-forming nature. At the outset of a new millennium, we are beginning to understand that the collective fate of humankind is in our own hands but if we continue to ignore our natural limits we shall experience the consequences in ways beyond existing cultural capacities.

Once upon a time, plastic trees were planted along a freeway in LA then uprooted by protesting citizens. But it might be asked: "What's wrong with plastic trees?" (Krieger 1973). We live after the "end of nature" (McKibben 1989). It is we moderns who first learned to privilege artifice over nature and now imagine post-nature. No part of the planet remains untouched by humans. All landscapes are enculturated, which is to say we see, reflect, inscribe, and act upon the natural worlds that surround us (which we call environment or that which environs us) (Hogan 2003; Seddon 1997). We experience nature but our senses are mediated by our own languages, social imaginaries, and technologies. For humans, nature is cultural and not only in ways of our choosing. It can be said that it is in our human nature to be cultural. We have the material resources to mass produce the simulacra of natural things. In mimicking the ways and forms of nature we also change our meanings and values of nature, and of our own appropriations, significations, imaginaries, and interventions.

We not only mimic nature, we consume it (Flannery 1995). Yet, we are still embodied, material beings that depend upon, and use, our "environment" for survival. Being near the top of the food chain we are beginning to face the consequences of centuries of *homo sapiens*' domination of other species, a domination that has led to the extinction of many other species of flora and fauna. Some of the animals under threat of extinction compete with human populations for resources. Not only do we have these problems with untamed animals, we have also made a massive imprint on the earth's surface with domestication programs—of livestock through to pets. Animals used for food production have radically reshaped nature, turning parts of all continents from wilderness areas into landscapes. But the process of enculturation is never one way; human societies that work

with animals are shaped by this close alliance that is at once cooperative and exploitative (with the power heavily weighted in favor of the *homo sapiens* masters). Pastoralist, agricultural, and industrial-urban societies alike have for many centuries worked with animals in taming nature for productive purposes. These relationships in turn have reshaped collective social imaginaries, institutions, and cultures—to name but three examples, the Olympic Games, circuses, and horse-racing industries. In each of these areas of human endeavor and play, *homo sapiens* is deploying animals that reflect our collective identities as *homo faber* even as we exhibit our own capacities and characters as *homo ludens*. So too our everyday conversation and jokes remind us of our codependencies and taboos (e.g. sheep jokes in pastoralist societies).

If thinking human culture *vis-à-vis* our environment were not complex enough in relation to animals, our domination of nature in food production extends the challenge to vegetarians, omnivores, and carnivores alike. This is especially the case since the industrialization of the countryside from at least the eighteenth century in England, exported to the world by the beginning of the twentieth century, not least in the mass production of food. It is another sign of our times: once mighty rivers dammed and reduced to streams and mass storage lakes to irrigate thousands of hectares of monocultures for mass consumption elsewhere, e.g. the tomato, the potato (for chips), maize (for corn syrup) are but three famous examples in the US. These foods are genetically modified, processed, and then distributed and consumed in contexts and settings very different from their original points of production. But the story of our use and dependency on nature is not only about production. Even the most humble of foodstuffs, such as cereals and "root" vegetables, are highly enculturated objects that go to the very center of human significatory practices and social imaginaries (see Gallagher and Greenblatt 2000). A plethora of recipe books, celebrity chefs, global food histories, and genealogies of particular food types (the curry leaf, the tomato, the potato, and the coffee bean) in recent decades underscores this critical insight.

In this essay, we address this dialectic of nature and culture by first defining the key terms "nature" and "environment." Because the elemental forces of nature are the absolute conditions of our material being, becoming, and dying (individually and collectively), it is a common-sense view to presuppose that nature is underlying and impervious to human being and action upon it. "Nature is natural: it just is!" Over the past century, social theory and the social sciences more generally have gone a long way to shifting this common sense to a critical sense of nature: these days it is relatively uncontroversial to assert the enculturation of nature. We affirm this achievement but add the rider that we are in danger of creating a new common sense that loses purchase on the radical otherness of nature that both forms and informs our very existence and destiny. The nature–culture dialectic demands that we read our own culture in and through nature, and that we understand nature as that which is not ultimately subordinate to human action. Having first restored our critical appreciation of nature/environment, we then seek to rethink "culture" in the active present tense of human being and becoming.

Our essay then shifts register to put our discussions of key concepts to work on two regional case studies involving a key element—water—in order to display the differing and changing meanings, stories, institutions, and actions that shape human engagement with ecological settings. We hope that these examples not only illustrate the value of what Jeffrey Alexander and Philip Smith (2001) have called "a strong program of cultural sociology," but promote a cultural sociology that places the nature–culture dialectic at

the forefront of a rethinking of culture as performative, autonomous, creative, and in continuous movement.

Defining "nature" and "environment"

We use the terms "nature" and "environment" interchangeably, with the former the generic term, and the latter as its sub-set—a specific example or expression of nature as a whole. In doing so, we are reflecting the bias of the greater part of Western literature and specifically of the English language. "Environs" is a Middle English word that depicts that which surrounds us. Thomas Carlyle, a renowned coiner of many new words and trafficker of exotic terms into common English-language parlance, is said to have been the first—in the 1820s—to turn "environment" from a verb to a noun: his specific innovation was to give the term a sociological application from its original natural life-sciences context (*Oxford English Dictionary on Historical Principles* 1993).

But it is "nature" rather than "environment" that has dominated debates about modernity, and for the very good reason that nature points us back to the material terms of being and becoming and dying—something that is tangibly beyond human mastery, an objective and critical horizon above and beyond our own interests and concerns. To put the matter in common-sense terms, "human nature" is only a bit part of "nature" writ large. The term "environment," on the other hand, too readily keeps an uncritical (i.e. unthinking, unselfconscious) focus on ourselves. We humans have been too readily given to speaking of "our" environment as if it is simply a background context that we own and which we deploy for our own interests, uses, and pleasures alone.

One of the most familiar—and enduring—understandings of nature in culture is that of nature as an infinite storehouse of wealth upon which industrial capitalism and the consequent flourishing of human culture are built. The famous exponent of this idea is Karl Marx. Far from viewing the progressive technological exploitation of nature for societal reproduction and change as a problem, Marx shares with the political economists from Adam Smith onwards an enthusiasm for the liberation of humanity from dependence on nature—as a liberation from "nature idolatry" and "rural idiocy." For Marx, the capitalist mode of production uses nature as object, subordinate to human interest and mastery. The potential that these new material conditions of plenty offer for *homo faber* to obtain the just conditions of good work and freedom from exploitation, alienation, and immiseration was the hope of the young Marx. Capitalism's technological revolutionary potential for freeing humans from work itself is the hope of the late Marx (Rabinbach 1998). As for Marx, so too the dreams of "progress" and "development" in the twentieth century.

By the time the Frankfurt School theorists, Horkheimer and Adorno, came to write *Dialectic of Enlightenment* in 1944, however, they had witnessed two world wars, a great depression, and the rise of Bolshevism and Fascism. Consequently, they were less sanguine about human prospects. The paradox of human domination of nature in modernity is for Horkheimer and Adorno the tragedy of development first grasped by Goethe's *Faust*. Far from liberating human beings from the vagaries of superstition, scarcity and want, the development of instrumental reason and the systematic separation of human culture from its natural basis had produced a fundamental contradiction. Horkheimer and Adorno recognized that human mastery via instrumental reason not only led to alienation from nature but to the domination of one human group over another (i.e. of masters over slaves, from, between, and across classes, races,

and genders). The rule of reason was founded on a myth of reason that was ultimately tyrannical.

As Murphy and Roberts (2004) highlight, however, modernity is characterized by a dialectic not just of enlightenment but also of romanticism. There is more than one way to be modern: nature is not only subjected to an instrumental rationality of domination, exploitation, and alienation, but is also a complex semiotic well-spring for a radical alteration in human self-understanding and engagement with the non-human world, embracing the sciences, religions, aesthetics, and new versions of subjectivity and reflexivity. This dialectic of romanticism *vis-à-vis* the non-human worlds involves various contradictory constructions of its otherness—as the sublime (wilderness) and as the projection of human affectivities and individuated self-formation. The significance of romanticism in all its various instituted cultural formations as a quintessentially modern phenomenon is underscored by the rise of various social movements of reform, from preservation and conservation to anti-urbanism and urban reform, along with their associated new institutions, professions, and bureaucracies of management.

It is in this context (mainly "First World" trans-Atlantic), that "environment" as a popular term of discourse has emerged since the mid-twentieth century. The rise of environmentalism manifested in social movements and ecological politics has brought the term "environment" into popular consciousness and everyday use. As demonstrated in the work of the Australian eco-political theorist and activist Robyn Eckersley (1992), these movements and ideas have deep roots in the emergence of romanticism in the late eighteenth and early nineteenth centuries. Eckersley develops a typology of contemporary environmental movements and ideas that connects the historic emancipatory promise of the dialectic of enlightenment and the deep ecological values of the dialectic of romanticism as revealed in contemporary left socialist, anarchist, feminist, and ecological movements. She grades them according to their normative orientations—from anthropocentricity to eco-centricity, and from mono-dimensional to comprehensive eco-political policies and programs. This exercise is helpful insofar as it highlights the intrinsic importance of ontological, epistemological, and aesthetic dimensions of cultures and repositions the ideological and material interests of political movements *vis-à-vis* the question of culture itself.

Defining "culture"

"Culture" is the abiding preoccupation of sociology. The contrast with "environment" is substantial. Environment is at best outside the house of society. It has been an "external environment," as it were, to a century of conceptual and methodological struggles concerning social structure and agency. Compared to the somewhat tortuous journey of the concept "culture," "environment" has not been a conceptual problem for sociology. Rather it has been treated as an external variable. The rise of a sub-discipline called "environmental sociology" represents a reflexive anxiety and ethical response by sociologists rather than a critical re-conceptualization of sociology's own terms of discourse. Even where a leading English environmental sociologist, Steven Yearley (2005), looked at the *Cultures of Environmentalism*, he undercut his own cultural turn by expressing a suspicion of theory and rhetorically resorting to concept-free empiricism. We are left with an undialectical appreciation of both "nature" and "culture" alike, let alone a dialectic of the nature–culture relation. Even sociologists' attempts to conceptualize the environment—most famously, Ulrich Beck's risk theory—whilst empirically rich in

application persist in viewing collective social action and decision-making as matters of calculative reason, and as power struggles between contesting stakeholders and vested interests (Lash *et al.* 1996).

So, how best can we think about culture so that environmental concerns and the question of the nature–culture dialectic can be brought into the house of sociological theory? At the risk of simplification and in potted form, we nominate four ways to think about culture:

1 *Culture is performed*. This is the ordinary anthropological sense of culture as something held and practiced in common—a whole way of life. Culture is something humans do. Therefore, we need to keep the critical focus on our doing and our thinking of our doing. This means paying more attention to narrative, to place and time, and finding ways of talking about the practice of culture and less on identifying factors, variables, and abstract ratios of power.
2 *Culture is autonomous*. Culture is viewed here as signs, customs, symbols, codes, and texts of meaning. It thus is not reducible to power structures or social construction itself (Alexander and Smith 2001). Sociology, as the in-house professional discipline of trans-Atlantic modernity, has too readily held culture hostage to power—modernization, social action, and systems theories. We think that in the twentieth century sociological theorists became so obsessed with structures and the science of power that they lost purchase on understanding culture as creation, reflexivity, and expressivity.
3 *Culture is creative*. Human cultures are expressive, reflexive, and creative. Collective creativity in turn needs to be explained as socio-historical yet unfounded by any external agency and not reducible to logics of material or social power (Castoriadis 1997). Hence the notion of the "social imaginary" is intrinsic to any self-respecting cultural sociology.
4. *Culture travels*. And in its movement it is transformed. So culture is not only hybrid (Bhabha 1994; Canclini 1995), it is embedded in a series of relationships and exchanges across time and place that are asymmetrical but reflexive and transformative (Beilharz 1997; Smith 1960). The classic text here is William McNeill's *The Rise of the West* (1963), which in turn is a reply to Oswald Spengler's theory of self-enclosed civilizations in *The Decline of the West* (1922–23 [1980]). McNeill treats Eurasia as a single civilization defined by cultural exchange. Moreover, the more hybrid and impure the culture, the further it travels (Sassoon 2006).

Towards a strong program of environmental cultural sociology: two case studies

Let us see if we can seek some potential ways of developing a strong program of cultural sociology—that is, one that views culture as performative, autonomous, creative, and in continuous movement—by putting the program to work on the nature–culture dialectic. To do so, we look at a natural resource essential to human survival and security, namely "water." Water is one of the most powerfully symbolic elements across all human cultures. It is used in "baptisms, libations, holy ablutions, fertility rites, for blessings and protection, and mortuary rituals" (Strang 2004: 85). When it is flowing, it is characterized as the "river of life," as a metaphor for the passing of time. In many locations such as

Lourdes, Bath, and the Ganges, it is believed to have healing properties. By considering a ubiquitous and quintessential natural element that is absolutely and universally essential to human survival and flourishing, we can tease out and highlight how human beings enculturate water in our naming, imagining, institutions, and uses of it. Moreover, recovering the centrality of nature to our survival and the meanings we give to nature in our social stories and traditions is, we believe, central to the task of interpreting contemporary environmental political struggles within and across nations and regions. We examine just two examples in the Asia-Pacific region—the Sundarbans in the Bay of Bengal (an eco-region that crosses a nation-state border), and the Australian island-continent (a set of social imaginaries, cultural practices, and policy regimes within a federated polity). Important to our argument, these two examples incorporate and cut across the standard sociological structuralisms of class, ethnicity, and gender that inform most environmental political and sociological analyses. They demonstrate a more general point—that any regional analysis today involves respect for civilizations, empire-colonies, nation-states, local governments, and global, national, and regional markets. In sum, they point to the need for a cultural sociology of environmental struggles even if we have not yet provided the means to its achievement.

Case study I: the Sundarbans, Bay of Bengal—a mangrove forest delta swamped by human problems

The Sundarbans is the world's largest mangrove forest area. In it, continent meets ocean in a maze of rivers spawning thousands of islands. Water is the primary element of the ecology, sustaining varied ecosystems where islands change shape with every turn of the tide. In turn, water shapes the ecological and political history of the region. Our case study reveals how creativity functions along multiple paths in the construction of social imaginaries in a unique water ecology. To tell this story we must unravel the issues of human migration, political geography, and economic development before we can understand the nature of the water issue that saturates the environment and human imaginations alike.

In this complex and dynamic water ecology can be found the largest contiguous population of tigers in the world (their man-eating trait is attributed to the physical properties of the water), living in uneasy alliance with a human population of seven million. The divisions are not merely between humans, animals, and flora, but are political also. The Partition of India and Pakistan in 1947 meant that 60 percent of the Sundarbans was apportioned to East Pakistan (Bangladesh after 1971), triggering an exodus of refugees into India. The majority of early refugees were the upper-caste, educated elite (*bhadralok*), who with their social mobility easily integrated with mainstream Calcutta society. Unlike the *bhadralok*, the lower-class, lower-caste refugees (*nimnobarno*) were met with grossly inadequate rehabilitation practices and forcible relocation. In a specific instance, refugees seeking a familiar water ecology occupied the island of Morichjhapi. The island was part of the tiger-reserve buffer zone, and to "protect" the tiger the government forcibly evicted the refugees, leaving several thousand dead (Biswas 1982: 19). The Morichjhapi episode of 1979 found its way into local narratives reconciling the violence perpetrated on the islanders by the state and the man-eating tigers. The people believe that the idyllic relationship between humans and tigers was broken after the Morichjhapi incident, when—following the lead of the *bhadralok* mistreatment of the *nimnobarno* and the government protecting the tiger at the cost of

human lives—the tigers began eyeing the poor as "tiger-food" (Jalais 2005: 1758). The cultural interpretation of the tiger–human conflict tied up with the class/caste struggle points to the dynamism with which the physical environment continuously refashions cultural narratives. The villagers rationalize and adapt to their social past and to the changes in their immediate physical environment by a creative reinvention of traditional beliefs. Culture and environment emerge as interlinked parts of a system of relationships that embraces the transformation of both the natural and cultural environment.

In 2002, the state government entered into a joint venture with a private corporation to set up an ecotourism project in the Sundarbans, with tiger tours having pride of place. Despite the inclusion of local people in the venture, almost every ecotourism claim made was contested, and the project was abandoned in 2005. One of the strongest voices that protested against the project was that of Amitav Ghosh. The publication of his novel *The Hungry Tide* in 2004, with its seamless narratives of the many histories of the Sundarbans, put the controversy into perspective for a global audience, especially with the poignant fictionalization of the Morichjhapi incident. *The Hungry Tide* was successful in highlighting the diversity and uniqueness of the Sundarbans, interweaving its social and ecological histories as against the homogenized vision of the ecotourism project. The novel was political as a cultural product that stood for an environmental ethos and a vehicle of social change that refashioned a particular "environmental" outlook. Above all, the title of the book—*The Hungry Tide*—pointed back to the central challenge facing the region: water is both the source of life but, with rising sea levels, also a threat to the survival of its inhabitants. The Sundarbans faces an immediate threat from climate change, with studies predicting that more than 15 percent of the existing islands will be submerged by 2020, leaving 70,000 people homeless.

Rising sea levels are a global problem, and governments and societies are fretting about the need to increase the heights of their dykes (Netherlands) or to build them (Thailand). Venice and Bangkok were already sinking cities, but now they face more permanent flooding. Island states in the Indian and Pacific Oceans are now assessing their options. The Maldives government recently announced an interest in buying land in India or Australia to house its population. The irony is that the Maldives is flush with cash from the ecotourism of the world's rich, who have come there in droves to admire the atolls of coral. Whole nation-states in the Pacific archipelagos are also facing this threat. The twenty-first century looks to be one characterized by ecological refugee movements that will add to the waves of forced migrations of the past century for economic and political reasons. The increasing threat of islands permanently disappearing further exacerbates the impasse of limited spaces and rising populations, decreasing standards of living, and depleting resources.

Case study II: Australia—not enough water?

In contrast to the water civilizations of its neighboring archipelagos of the Indian and Pacific Oceans (Jumsai 1988), Australia is a continent characterized by extensive arid zones, unpredictable rainfall patterns, and large underground aquifers. It has much in common with the arid regions of the Middle East and Northern Africa and now, increasingly, Southern Europe. In all other respects, however, Australia is more readily compared to the other New World settler-societies that emanated from the British empire, namely North America, New Zealand, and South Africa. It has been "made" by a number of influences that relate to the circumstances of its settlement, its historical path

through modernity, and the relationship between itself, Britain, and the rest of the world.

Water in Australia, despite being intimately associated with the cultural activities of food production, reproduction, and religion, was always regarded by European settlers as an "external variable" with no bearing on (settler) culture. Water is "irrigation," an "environmental flow" or an "entitlement." In other words, water is an abstract entity, as something without a history or a culture. Yet, water is neither ahistorical nor acultural: it has human meaning attached to it. It evokes peace and serenity, or terror and violence. Especially in Australia, its absence—as drought—can elicit powerful cultural responses (West and Smith 1996, 1997).

These tensions have played out in the history of water management in Australia. After the settlers came to terms with a hydrological environment that differed substantially from European conditions and expectations, the initial haphazard and uncoordinated delivery of water for mainly individual benefit was subjected to explicit state control of the resource, and managed for the collective good of all citizens.

Engineers had a unique position within this national water/irrigation culture. They held and controlled the knowledge about water flow, volumes, pressures, and evaporation rates, and they combined this knowledge with bureaucratic skills. They played an integral role in realizing water benefits through the actions of the state. Centralized, state-run enterprises carried out a range of activities well outside their main jurisdiction of water supply—including settlement of families on irrigation blocks, financial assistance, housing, education, marketing advice, and even moral guardianship. Water engineers were the embodiment of the notion that the principles of engineering could be applied to social issues. But they did not act in isolation. There was widespread societal consensus that the technological transformation of rivers and use of water for population settlement and economic growth was a worthwhile exercise. What emerged from all this was a complex mix of nation-building ideals, attempts to reconcile diverging foundational myths and material interests, and responses to the imperatives of statecraft. In essence, what was built (over and above dams, locks, and weirs) was a stable conglomeration of ideas and institutions—not exactly the state, the nation, or communities, but organizations and conventions that invented, re-invented, and responded to all three.

Today, the certainties of the "national Australian waterscape" are rapidly being "washed away." Changing social priorities, political philosophies that favor the market over the state, and the challenge of climate change have ushered in a new management regime. Water is now understood as an entity with a use-value in its own right, as a commodity to be bought and sold in the marketplace. The potential exists here for water to be used solely for wealth creation detached from production *and* detached from any concept of it as a public good. As the price of water rises rapidly, however, the general population of suburbanites and country folk alike are devising both private and public solutions to perceived threats to water infrastructure, systems, and flows.

The challenge and the promise of a cultural sociology of nature

This essay has argued several things. First, nature is a better concept than environment to think with about the question of ecology, sustainable development, and human flourishing. Second, sociology has always had a realist appreciation of the materiality of

culture and this has informed its critical understanding of the nature–society dialectic. Nevertheless this emphasis has been at the cost of an appreciation of the autonomous power and creative value of culture that is performed as it moves. Third, culture is our only means of expressing ourselves in our material worlds. So, although nature is beyond human control, and therefore is a critical horizon of our own material being, it can only be grasped in and through our human imaginings and actions. Demonstrating this was our purpose in examining the two regional case studies by considering their cultures and engagements with their ecologies *vis-à-vis* water. We think our two case studies point towards the promise of a strong program of cultural sociology for understanding more about struggles in the cultural politics of the environment, but our analysis is leavened with a salty recognition that human ordering and society are but a part of larger ecology that we call nature and that is neither ably described as "our environment" nor reducible to our needs, fantasies, and uses.

At the outset of the twenty-first century, we know what the main ecological challenges are: climate change, species diversity, non-renewable resource depletion, entropy, population control, sustainable development, waste management, and livability. Most of these issues are no longer even controversial in scientific circles, or now even amongst the world leadership elites. Moreover, we have many tools at hand to solve and apply the solutions to these challenges. Turning these knowledges and scientific innovations and technologies to systemic, institutional, and economic ends is the central conundrum of human collective life. There are no simple techniques of market or states that can easily solve the challenges or apply the solutions. There are no structures, systems, or hidden hands of nature to fix things. The politics of environment cannot short-circuit the radical diversity of contexts and instituted forms of cultures across the globe. The cultural politics of environment is intrinsic to the definition and practice of the cultural transformations of world environment.

Paradoxically, conceptualization of culture has proven harder work than understanding the environment—at least for sociologists. Yet all forms of representation of nature—mythic, aesthetic, moral, and scientific—are but the work of culture itself: as socio-historical imagination and creation, instituted culture, and autonomous modes of meaning, symbolism, and interpretation. Innovative technologies, new cultural adaptations, and ultimately new stories and new systems are being developed. That at least is the challenge and the promise. Whether or not our collective cultural reflexivity is fast enough in adapting to the demands of our natural environments is the central question of our times, and one faced by all humankind—at once and as one—for the first time in world history.

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