

# Beyond Dueling Determinisms: Toward Complex, Humane and Just Ecologies

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## Introduction

After reading the article and reflecting at some length on my mixed reaction, I came away with the sense of having been on a roller coaster ride. It inspired a kind of virtual fear, followed by grateful relief that the fright would not carry over into the real world. The fear comes from exaggeration of real experience and reference to a long history of possible danger (falling, crashing, sickness) attached to similar sensations. We are alternately exhilarated, terrified, uncomfortable and restored. We experience a heightened sensation of movement and acceleration (up, down and around), coupled with a confusion of the sense of direction. In this case the present danger is real but may actually be obfuscated by the overstatement of virtual danger. We confront an overwhelming array of dystopian determinisms, and biological, historical and national destinies. We are presented with a brick wall at the end of an infinite ride. We are left in animated suspension (not a typo), to endlessly contemplate the immanent and seemingly unavoidable cataclysm that flows naturally from who *we* are and who *they* are (*they* being in charge of *where* we are). We defy gravity only to be overcome by it again and again. This ride gives us the fear and exhilaration of flight without the freedom and teaches us that leaving the ground is a fearsome and ultimately futile proposition. Looking ahead, resistance is futile, or alternatively, looking back, resistance leads to the pre-feudal. We end, where we began, chastised and a little dizzy from the journey.

There are real dangers on this ride. First, we may be so dizzy and confused by these theoretical and empirical ups and downs that we will not recognize the real social, economic and ecological dangers that face us outside. Secondly, we may be so paralyzed with pessimism as we contemplate the brick wall mural at the end of the ride that we are unable or unwilling to act, to seek change, to engage in cultural and social transformations to address real but not intractable social, economic and ecological problems.

There are, however, several alternatives to fear of flying. It is perhaps no accident that many feminist authors of speculative fiction as well as social theory have grappled with the question of technology, gender, nature and power in the far future, in deep and distant space. For several novelists, among them Ursula Le Guin, Marge Piercy, and Octavia Butler, technology is only as good or bad as the nexus of

social relations in which it is embedded. While it is never neutral in actual practice, it is not necessarily, intrinsically, good or bad. It does not exist as an abstraction, it exists only in practice, situated in space, place and social order. The point is that technology is always embedded in systems of social relations. Likewise, feminist social theorist Donna Haraway (1991) suggests that we blur the boundaries that we have drawn between animal, human and machine and that we complicate our notions of technological progress to confront the infinite array of possible recombinant relations between humans, "nature," social orders and technologies.

As I read through the collection of examples, evidence and arguments in Lough's article I find myself looking to those novels, as well as formal philosophy (taught to me, I dare to say, by some very literate men and women, in person and in writing) and everyday ethics (taught to me by mothers, grandmothers and others), rather than to evidence from biology, ecology and the laws of thermodynamics. I will include a few comments on the technical points but will not dwell on that. I also look to examples of encounters between contemporary social movements and technocracies to test and respond to Lough's analysis. After noting the key contributions in the article and discussing some of our differences, I suggest an alternative theoretical grounding in non-essentialist ecofeminism, feminist poststructuralism, feminist environmental activism and theories of complexity in ecology.

## Challenges to Patriarchal Civilization(s)

What is refreshing about Lough's analysis is the straight-up challenge to civilization-as-we-know-it, the suggestion that it is not necessarily a "good thing." What is troubling is the assertion that any civilization is necessarily, always and everywhere, a "bad thing." Lough judges production systems by human centered biological criteria such as nutrition, health, life span, and social yardsticks, including distribution of labor, food and political control. The article provides a rich source of references and useful data summaries on health and nutrition performance criteria for production technologies and land use systems. Economic efficiency is rejected in favor of energy efficiency, equitable distribution and adequate nutrition. The reference to basic biological indicators of well-being is laudable and tells us much about the cost of the transition from foraging to sedentary agriculture. Yet Lough does not give equal weight to the fact that life

expectancy is far higher in urban and industrial societies, and in some agricultural and mixed farming systems. Statistics on the current skewed distribution of these indicators might still make a compelling critique of the high cost of "progress," but they are not included in Lough's tally of the costs and benefits of various systems. He limits that particular argument to the transition to agriculture. Overall the argument is not yet developed enough to carry the weight of these very broad questions and to integrate the very discrete (albeit illuminating) data sets and examples that Lough invokes to support his case.

One of the strongest aspects of Lough's work is his inclusion of gender at the national and international scales, acknowledging and applying several important insights in the work of Mies, Shiva, Merchant and Seager. Like them he relates patriarchy to political and production systems, both historical and contemporary and he recognizes and makes more visible the connections of gender ideologies to social units well beyond the household. He cites prevailing gender ideologies as pathological influences on society (so far I'm with him) but he also posits these as logical outcomes of biological differences and specific land use technologies. If, instead, we see those ideologies as socially constructed, then we can recognize their existence and their impact, yet we can imagine change and a myriad of alternatives. It is those alternatives that feminist poststructuralists seek to imagine and to realize.

Lough's analysis also recognizes the political, technological and ideological connections in the history of women's oppression, including the use of witch burnings to discipline women and men to accept male domination and displacement of women from positions of power (as healers, religious leaders and landowners). Lough accepts however, the proposition that political and economic domination is equal to annihilation, and laments the "elimination of [women's] vernacular knowledge, skills and relationships." Several ecofeminist authors also suggest this, including Merchant (1980, 1989), although she notes that some people carry over previous types of consciousness into new eras marked by technological and ecological revolutions. However, Lough and Merchant both imply a historical progression and totality of domination that is belied by repeated outbreaks of social and ecological consciousness that reassert knowledge and values supposedly displaced and erased by a given civilization. This periodic resurgence of alternatives indicates a broader continuity of multiple cultures, arts and sciences (whether among women or ethnic, religious, race and class-based groups).

### **Biological and Technological Determinisms**

One of the troubling points in the text is the reliance on necessity. Mechanistic connections are presented as almost

genetically determined, which undermines the possibilities for creativity and a viable humanity with more than 8 million (human) persons on the planet. To identify literacy and civilization as inherently destructive of our habitat (from global to local) feeds the misanthropic version of environmentalism and justifies the Draconian excesses of Malthusian population control advocates. At the same time this analysis justifies, from another position, the anti-environmental politics of those who claim that environmentalism is inherently committed to the end of culture and/or civilization. Many of us might not shed a tear over civilization-as-we-know-it, but would not be willing to condemn all organized social groupings greater than 250 people to the trash heap.

The whole argument against civilization is made on the back of necessity, while climbing a ladder of linear progression from foraging to agriculture to industrial production. The ladder takes us from subsistence heaven to postindustrial hell. It is this one-track journey that railroads the complex history of technology, society and politics into two gears, forward and reverse. What happened to the reference to Stephen Jay Gould and the suggestion that "nature" has bushes, not ladders? I'm voting for the bushes, thorns and all, and suggest that Lough restructure his analysis around that model; he might break free of the necessity trap that now sits ready to strike anyone who moves up the intensification railroad.

In one section Lough states that plants, animals and subsistence cultures (an uncomfortable and dangerous association, for me) have division of labor and organization but not hierarchies. Yet earlier he equated organization with hierarchies. It is, I think, important to differentiate between the two. While some may suggest that all organization is and must be hierarchical, meaning a very centralized and top-down power structure, there are others in biology as well as social science who have made compelling cases for self-organization from below (Ahl et al. 1996).

To naturalize socially created differences also invites the possibility that our work will be used to create alibis of power, as biological excuses for the necessity of social oppression. The recent Commentary article Professional Denial by Gretchen Schafft in the January 1999 issue of Anthropology Newsletter provides a powerful example. She documents the complicity of some schools of anthropology and anthropologists in the holocaust, based on evidence of direct and active collaboration as well as the indirect contributions through essentialist racial categories and hierarchies and theories of biological determinism of social behavior. While we may not abandon all possibilities of biological or genetic influences, "natural" categories and biological determinism certainly warrant a great deal of caution, given the demonstrated potential for abuse.

In *Feminism and the Mastery of Nature*, Val Plumwood (1991) examines the difficult impasse encountered when ecofeminists have adhered to biological explanations of gendered relations to nature and culture and have affirmed essential gender identities. One group of feminists solves this problem by rejecting the link of women to nature, while still accepting the nature/culture duality, with culture superior. Lough would no doubt place them among the “female clones” mentioned in his discussion of patriarchy. Many ecofeminists embrace an essential and necessary dichotomy between women and men and between nature and culture. Women are connected to nature and men to culture; women are enjoined to reject culture and rejoice in their exclusion from it and to claim privileged connections to nature. Men are then left to inhabit the powerful but desecrated domain of culture, or to cross over to the feminine, “good” side. Women claim subsistence and men commerce and so on. Why would women embrace the down side of this nature/culture duality that has been turned on its side and converted into a hierarchy, with culture above and nature below? One ecofeminist response has been to propose the reversal of gender-polarized power relations, putting women and nature on top. Another response is a variant of separate but equal, accepting the duality of women and men and also of nature and culture, but not the hierarchy. There is, however, more choice than up, down or a precarious neutral in the duality sweepstakes. We can reject the simple dichotomies and necessary associations/identifications based on gender, or for that matter ethnicity or “nations.” One can claim women’s place in culture, and also embrace “nature” and many women’s actual, but not necessary connection, yet reject the rigid dualities of culture/nature and woman/man. It is this latter option (well presented in the works of Donna Haraway (1991), Sandra Harding (1998) and Val Plumwood (1993)) that is missing in Lough’s analysis.

Perhaps the option to join an ecocidal and misogynist culture isn’t much of a choice, but surely it’s worth exploring the possibility of creating another kind of culture and civilization, one that is not destined to reach such ends, a different branch as it were. The ladder of land use and labor intensification may be a dead end, literally, but the tree of life (or S. J. Gould’s lowly shrub) offers infinite possibilities for rooting ourselves in earth, yet reaching in every direction for sun and sky. Rather than positing culture and civilization as polar opposites, or divergent binary branches of a single trunk, perhaps we need to rethink the culture/nature (and Lough’s culture/civilization) dichotomy.

Lough also separates pre- and post-agricultural cultures into polar opposites with a newly reversed status. He places foraging and “subsistence” agriculture in pre-agriculture and everything else as sedentary agriculture and beyond. This

binary logic places intensive multi-story gardening systems in the same category as an economy based on the manufacture of weapons with massive production of toxic wastes. In his analysis the one leads inexorably, necessarily, to the next.

Yet, intensive agriculture and industrial wage labor have no exclusive on oppression. Henrietta Moore’s description of gendered space and power among the Marakwet (in Kenya, during the 1970’s and 80’s) suggests a powerful patriarchal ideology at work in a society that still depended heavily on foraging and subsistence agriculture. The accounts of the Yanomami in Brazil, though now subject to highly contested explanation, also suggests that male domination can occur among foragers and subsistence cultivators. What do we make of this? We could embrace the necessity of this connection and postulate a kind of patriarchal original sin or divine right, depending on who we are and how we think. We could also however, accept that such structures and behaviors *can and do* — but *need not* — occur across many kinds of societies, technologies and land use systems. We could then look at patriarchy as one well-trodden and too often chosen path to be avoided, or once embarked upon, to be abandoned. If we are branching on trees instead of climbing ladders then there is always somewhere else to go, and it doesn’t have to be the Neolithic past.

### **Nations, States and Actually Existing Communities**

I would suggest that actually existing communities come in many packages. Lineages, nations (in Lough’s sense), and states can all represent clear and present danger as well as safe haven and refuge to women and men or to the multiple species that shape and co-habit the complex ecologies that sustain life. Confronted with absolutist arguments about the goodness or evil of various types and levels of social units I have resorted to role playing. If I cast myself as an African American woman in the rural southern U.S. of the 1960’s, then one nation (African American) is a refuge and safe haven, and the other (dominant white culture/Caucasia) is largely hostile. The local state might be a fierce enemy, while the national state is more friend than foe, for the moment. Lineages vary from brutal and oppressive to nurturing and protective, sometimes combining both. Likewise a whole constellation of formally patriarchal churches actively creates safe space while another cluster of churches indirectly foments violence against me and yet another simply looks the other way as struggles of historic proportions envelop me. I would be loathe to write off all of the positive instances of state and church intervention as minor aberrations of civilization. The federal state seems to me to have played a major role in invoking the rule of civil society for a more even distribution of rights, even if assets were not re-distributed. Local states often acted to maintain segregation and white

privilege. Churches varied, with major differences within and among particular denominations.

In contrast, if I try to imagine the experience of a young Dominican man (age 18, living in 1998 in the inner city of a rusting post-industrial region) then the local state, the national state and the local (white) homeowners' association may all be hostile. Fractal nations might well be expressed as gang turf in neighborhoods and identity politics at city level, both of which might pit him against others who share much of his experience. The patriarchal, extended family and community level rainbow coalitions might represent the safest havens, or alternatively, elite (and usually private, white and patriarchal) schools might best shelter the "high achievers" among his peers. Shelter, survival and life-affirming values may be rooted in communities of political solidarity as well as in biologically related male lineages. The state and the gang might well conspire (unwittingly in concert) to send him to prison, where fractal nations re-assert themselves in even starker and more brutal terms. His mother might find her sons to be more at risk from state and gang violence and her daughters from "domestic" violence. Yet the daughters might also be prosecuted and imprisoned by a hostile state for domestic relationships with "outlaw" men. They might in turn be sustained and supported by extended families and women held together within patriarchal lineages.

A contemporary international example of the changing and complex roles of social organizations and institutions is that of U.S. sponsored land tenure reform in the "transition economies" of Eastern Europe. In Albania, the "liberal" land tenure reform in the 1990's has taken land back from the state (and actually existing communities which had sprung up on the state land over several decades). The land is then re-distributed to the "original and rightful owners" according to the "national culture" and local lineages, that is, to the "patriarchs." They refer to themselves by that term and are so named in formal reports to USAID. Immigrants and other non-lineage residents and women then ceased to have any standing as legal occupants and users of the land. Here we have a mix of multi-national corporations, intergovernmental agencies and national bureaucracies acting to dismantle state power over land and people and to restore nationalist and explicitly patriarchal power over women and land. Actually existing communities of people who are from the place but not lineage members are simply disenfranchised. Their material dependence on the land and daily practice of social and ecological relations over decades is erased, trumped by "nation versus state" arguments.

The recent protests over privatization of state forest lands in Nairobi, Kenya — led by women's groups and students — provide a very dramatic and positive example of multiple subjectivities at work in actually existing ecofemi-

nist activism. Wangari Matthai (like Vandana Shiva, Donna Haraway, and a raft of other feminist activists) is trained in the "natural" sciences (veterinary, range, and animal sciences to be exact). She has leveraged her way between party politics in the Kenyan Parliament and presidential races, and a broad range of separate and overlapping campaigns of Green, Human Rights and Women's activism. In her most recent campaign she led a tree-planting expedition to the Karura Forest in the Nairobi suburbs to protest government transfers of public forest land to land developers. Matthai, with women's, environmental and student groups faced violent beatings at the hands of hired thugs, and later soldiers and police. Matthai was hospitalized with a serious head wound and hundreds of students clashed with police resulting in numerous arrests and beatings. An international outcry, including an Amnesty International Urgent Appeal, urged an end to the violence by government forces and several groups called for the state to respect the national forest. Matthai has twice confronted the Kenyan state on environmental grounds (literally and figuratively) on public park and forest lands in or near Nairobi. She is not protecting shifting cultivators or a large "pristine" forest of indigenous trees and rare and endangered animals. The Karura forest is full of the much reviled Eucalyptus and Cypress species as well as indigenous trees. She is protecting public places that are green spaces and embody social as well as ecological relations. On other occasions Matthai has confronted the state on church grounds, over human rights issues during periods of "ethnic clashes" fomented by state policies and actions. Matthai has represented forest preservation and women's interests as well as broader democratic and human rights concerns through holding apparent opposites (environmental preservation and social justice; politics and science) in creative tension, not by choosing sides in false dichotomies. She is clearly courageous and no stranger to conflict and danger, yet she embraces complexity and reconciles apparent opposites in political action.

The historical absolutism of Lough's argument is not helpful in making sense of these examples. The categorization of particular types and lower levels of social organization as inherently more benign to women and ecologies than larger social units does not hold up. Absolutism, essentialism and the relentless progress of a dystopian history all obscure rather than clarify the reasons for oppression and the alternative social and ecological possibilities.

The philosophical variant of necessity may be the source of some very oppressive social, economic, political and even military interventions. Lough accepts and promotes the notion of a necessary connection between particular kinds of technologies, economies, cultures and politics. He also accepts a connection between literacy and civilization and

then links civilization to patriarchy, misogyny and ecocide. We are left with a necessary link between literacy (and all literate humans), misogyny and ecocide.

We need to look at proximate structures of control and dependency that selectively damage people (by gender, ethnicity, nationality, religion, class) and ecologies, and we also need to examine the larger (and less selective) webs of control and dependency. And we ought to observe the leakages and linkages between systems, a subject treated in depth by Donna Haraway. The frequent references to discourse in global struggles and to the linguistic tricks used to demonize or dismiss resistance would find resonance and clarification in the work of Escobar (1994, 1996), among others.

Overall the necessity arguments block any possibility for mapping our way out of the mazes that contain and constrain us. If we can see the complexity of those mazes, with all their branches and turns, we are more likely to see a multitude of possibilities for ways out, through and around the structures that both support and distort our lives. In a word, the necessity in Lough's argument is entirely unnecessary.

### **Families, Values and Valuation**

The article ends on a troubling note, with an appeal to reconsider our values and re-think our social, ecological and economic politics. Lough asks "What is your life support system worth? And that of your children and loved ones?" What else is at the root of patriarchy but seeing the world as the life support system of ourselves and our progeny? Isn't that what gave rise to so many of the very real problems he's raised? Isn't part of the problem the fact that powerful people so often try to make ecologies into subsidiaries of private lineages, economies and other "members only" institutions.

What else would improve our ability to tackle these questions? On the ecological side I would return to the work of Howard Odum and other systems ecologists, as well as Rappaport and the cultural ecologists. The discussions of efficiency would be better grounded in the work of Odum and several of his colleagues and students, who include solar energy as an input, which incorporates land area, and substantially changes calculations of efficiency. Lough's energy analysis, as far as I can determine, is based on human energy input as if the sun didn't matter. Gerald Leach (1976) conducted an illuminating analysis of energy returns to labor, land and other inputs under a wide variety of agricultural systems, from foraging and shifting cultivation to highly industrialized monocrop production. The winner of the optimal land/labor/energy efficiency contest in his analysis was Chinese peasant agriculture of the 1930's. Other subsequent

analyses have found the Quaker farms in Pennsylvania to optimize returns to land and labor in energy terms with substantial use of unpaid family labor. The contrasts and common features of these two systems present a sobering prospect for linear models of literacy, labor, politics and energetic efficiency. Each case offers a very instructive example of the complex relationships between social systems and technologies, without assuming that the connections are necessary.

Perhaps the really important question is "Where do we find the roots of a common sense of social and ecological proportion, connection, and responsibility?" Where do respect for human rights and reverence for life reside? How is it expressed and mobilized? Why is it situated in particular social relations? How does it relate to other social and biological categories? How does this impulse toward affinity articulate with relations among groups of people and between humans and other beings? Is this sense of social and ecological responsibility widespread? Is it identified with a particular level of social organization or is it an opposition force existing within and across many levels of organization and in networks across many places? How can we foster it?

While Lough largely historicizes and institutionalizes difference I would prefer to socialize it and to recognize the differences within and across cultures as well as historical periods. In fact, I'd like to get beyond social location in the institutional sense and complicate our situation. To embrace complexity is to accept the possibility of desired changes as well as surprises.

Nothing is what it seems at the moment or what it was at its inception, least of all the partially patriarchal institutions which now do govern so much of our lives and Life-on-Earth. Just as a capitalist society can produce contradictory processes, people and eventually revolutions, so can patriarchal societies (agrarian, industrial, post-industrial) produce complicated encounters and surprising offspring. The apparently inexorable "march of progress" carries with it the possibility of a street dance or a country carnival. Even as we acknowledge and confront social injustice and ecocidal behavior we can also recognize, and take courage from, the partiality of patriarchy, the complexity of states, nations, lineages and households, and the recombinant possibilities of future cultures and ecologies.

### **Endnote**

1. Footnotes and references can be found at: [members.aol.com/tdietzvt/HER\\_lough.html](http://members.aol.com/tdietzvt/HER_lough.html)