


EDITORIAL PERSPECTIVES

THE HUMAN–NATURE INTERFACE: NAVIGATING BETWEEN UTOPIC AND DYSTOPIC DETERMINISMS¹

This essay begins at the confluence of two streams of investigation: 1) the nature of human species-being (symbolic reference, culture, language, labor) in relation to biological evolution; and 2) the limits to population growth, economic growth and, indeed, human survival, imposed by planetary ecology (resource constraints, biological adaptations).

The second stream has a vast literature, from the somewhat mystical (but eloquent) formulations of the Deep Ecology writers — *e.g.*, Chris Johnstone (www.rainforestinfo.org.au/deep-eco/johnston.htm) — to the works of Nicholas Georgescu-Roegen; Jeremy Rifkin; Donella H. Meadows, *et al.*, authors of the influential 1972 book *Limits to Growth*; and (more recently) Bill McKibben (350.org). While prognostications vary, the keynote is sounded by McKibben’s call to reduce atmospheric carbon dioxide levels to a safe limit of 350 parts per million, and the monumental unlikelihood of achieving this, given current trends (see also the article by Minqi Li in our last issue). The general cast of the writing on the dangers of fossil fuel production/consumption, peak levels, tipping points, and so on, is hugely pessimistic. As Derek Lovejoy wrote in S&S’ Special Issue on “Marxism and Ecology” (60:3, Fall 1996), “the possibility of a transition, over the next century, to a stable, sustainable global economy with high living standards for all, exists . . . but the constraints are tight.” A major worry is global warming, precipitating *catastrophic climate change* (“C3”), and the consequent collapse of “civilization as we know it.”

1 Drafts of these “Editorial Perspectives” essays are always circulated among members of S&S’ Manuscript Collective for comments and suggestions. In the present case, what resulted was a veritable explosion of critique and debate! This is ongoing, and some of it may appear in our pages in future; readers are, as always, invited to participate. In the meantime, I should state for the record that a) my colleagues’ input is central to making these essays as useful as they can be; b) the views expressed here are entirely my own, and not any sort of official position of the journal. I hope this note will pique readers’ curiosity! — Editor.

For the first stream there are also many sources, but I will refer to my own *Deep History* (SUNY Press, 2007), begging readers' forgiveness for this self-indulgence. In that book I put forward two claims (summarized just below) that some readers have interpreted as "optimistic," in the sense that they seem to posit the likelihood, even the inevitability, of continuing human progress and prevalence (I won't tempt the furies by saying "triumph") over nature. While I don't think I posit anything of the kind (again, see below), the meeting of these two streams does foreground the contrast between optimism and pessimism in evaluation of the human prospect. And I think Gramsci's famous aphorism — "pessimism of the intellect, optimism of the will" — is *not* helpful in this context (however well it may capture the irreducible role of subjectivity in revolutionary situations): if the intellect is at least moderately successful in grasping the true situation facing us, and if pessimism is warranted, optimism of the will can only lead to failure and demoralization. The disjuncture between intellect and will suggests an idealist voluntarism that Gramsci himself would surely not have endorsed.

The two *Deep History* claims are, first, that humans possess a key capacity separating us qualitatively from all other species, plant or animal. This is the capacity to create, bestow and use symbols, mainly but not exclusively in the form of language, a capacity formed in the social process of labor. Symbols are the basis for culture, for acute individual self-awareness, and for the distinctively transformative relation of humans to the natural environment. The relocation of the key source of behavior from instinct to consciousness has a major implication: humans not only transform nature in ways that transcend the passive relation of other species to their external circumstances; that transformation is itself continually transformed, since symbolic reference contains within itself an inherent capacity to develop. (Doing something in consciousness entails doing it more effectively over time.) The symbol, then, is the basis for a central plank in historical materialist theory: development of the productive forces as an immanent tendency.

The second claim follows directly. If humans act upon the natural environment — making tools, learning to use (*e.g.*) fire, wind, water, animals, electricity, nuclear fusion and solar power as energy sources, developing entirely new food supplies, making protective clothing and dwellings, creating the urban built environment, and so on — we sever the connection between reproductive success and formation of new physical and behavioral characteristics. Natural selection rests on the link between successful reproduction and shaping of the genetic code; but this link is broken. The simplest illustration should suffice: if we learn to make and use warm clothing to protect against cold, the opportunity for hairier or furrer individuals to survive more successfully, and pass their hairy or furry genes on to the next generation, is thwarted. To the extent that, in social evolution, individuals

with non-adaptive physical or imprinted-behavioral traits are nevertheless able to reproduce — because these non-adaptive qualities are replaced by tools, learned behaviors, and social institutions — the process of genetic evolution is disrupted. *We are no longer evolving biologically*, in the classical Darwinian sense. Cultural evolution replaces biological evolution.

This is a qualitative leap; it is not a matter of “more or less.” It affects not only humans but all plant and animal species whose own reproduction is increasingly controlled by human social purposes. *Culture transcends biology*. Of course, we remain biological creatures: we must breathe oxygenated air, ingest food, expel wastes, reproduce. This is dialectical transcendence: while humans achieve the unique capacity to transform the natural world through symbolic consciousness, the laws of nature are never abrogated. Indeed, our continued existence within those laws is a matter of major concern (as we know). And over a much longer time frame than that of cultural evolution, genetic mutations accumulate, without the uniformity that natural selection would impose. In biological time, then, we lose genetic specification. That process, however, might well be interrupted by the advent of symbolic intervention into the shaping of the human genome itself.

I realize that this position flies in the face of common sense. Readers will have taken it for granted that evolution, as generally understood, encompasses all living creatures, including humans. Indeed, Darwin himself would have insisted on the profound continuity between human and animal life generally, as part of his campaign for biological science against the theological conceptions of human divinely inspired uniqueness that were common in his day. Moreover, the claim for the qualitative transcendence of symbolic reference, and its implications for biological evolution, must be addressed by specialists — biologists, linguists, geneticists — of whom I am most certainly not one! Nevertheless, distillation of insight into the pervasive and profound implications of symbolic reference, coming from Marx and Engels’ early theorizations of human species being and insights scattered throughout their later writings, symbolic interactionist social psychologists Mead and Cooley, the work of anthropologists Leslie White and Marvin Harris, sociologist Ernest Becker, evolutionary theorist Terrence W. Deacon, Soviet-era socio-linguistic theory as referenced by names such as Luria, Vygotsky, Leontiev and Ilyenkov, and many others, as well as careful inference from the core mechanism of natural selection as such, all point to this conclusion.

Symbolic transcendence, of course, is anathema to the deep ecologists. Johnstone: “. . . we are part of the earth, rather than apart and separate from it.” Readers will be aware of calls to “coexist with” nature, rather than attempt to “dominate” it. I must, however, make this affirmation in response, which is clearly not something that can be “proved” in any simple way: humans

transcend nature — this is not a matter of choice — simply because our linguistically, social organized consciousness affords us no other way to be. Like it or not, God, we humans *have* stewardship over the planet. Of course the question is how we will *exercise* that stewardship, and whether or not we will be able to address the challenges and constraints stemming from human population and expectations, resource scarcity, waste sink exhaustion, threats to planetary ecosystems. That in turn depends on how soon we can replace unprincipled, exploitative, antagonistic social relations with principled, unitary and non-antagonistic ones. It also rests on the extent to which progressive and working-class forces can impose some sense of reason and reality on existing political systems, prior to those momentous transformations. The effort to force capitalist societies to do things for humanity that go against those societies' own inner nature is in fact a major source of the consciousness and capacities making revolutionary transformation possible (see “Whither the Occupy Movement: Models and Proposals,” Editorial Perspectives, S&S, July 2012).

Now, is this *optimistic*? Does it amount to some sort of teleology — humankind “must” prevail, because some mystical force is guiding it, or because logic so dictates? These are rhetorical questions, of course, and the answer (*Deep History* is quite explicit about this) is clear. There is absolutely *no* presumption that we will “make it”! Either C3, or nuclear annihilation, or the triumph of E-coli or some other virus or bacteria caused by our penchant for rising population density and falling biodiversity, could do us in! Perhaps the evolution of intelligent life on this particular planet has occurred too quickly, with an insufficient foundation in fossil fuel reserves. On another, perhaps larger, planet in some other part of the galaxy, or andromeda, the basis for a longer phase of extensive growth of productive forces may in future enable (or might have in the distant past enabled) transcendence of antagonistic social class structures, in time for principled and sustainable relations with nature to take hold. And no phase of successful human prevalence over/development within nature — including continuing growth of productive forces not as ever-increasing scale but as the ongoing qualitative extension of human knowledge and creative power — lasts forever. As one of my correspondents writes, “There is no guarantee that the temporary adaptations that a species has made will *always* be a ‘fix’ to changing environmental conditions.”

The genie of the superorganic, of symbolic reference and transcendence of natural selection, however, cannot go back into its bottle. Perhaps a little thought experiment can run this point to earth.

Imagine, as in the 2011 film “Rise of the Planet of the Apes,” that a viral epidemic goes out of control and eludes all attempts of organizations such as the Centers for Disease Control (and its equivalent in other countries) to stop

it — an ELE (“extinction level event”). Human population may be decimated; the quality of life (“civilization as we know it”) may revert in drastic fashion; and, indeed, we may not survive at all. The pre-symbolic response would be to suffer decimation until a resistant mutation occurs, if indeed that ever happens. But our response, by contrast, would necessarily be symbolic: there is, again, no other option. We would create safe zones — controlled sanctuaries, whose enormous cost limits their availability to a small subset of the total population. Access to the safe zones would be determined by the stage of social evolution. If class-antagonistic principles still prevail, wealth and power would determine who survives (think of the Titanic!), and the conflict over this would greatly reduce overall chances of survival. In post-antagonistic conditions, survivors might be chosen for their skills; if skills are widely dispersed, choice may be made by a democratically administered lottery. Natural selection would never have a chance; it is way too slow, time is pressing, and conscious decisions must be made. We could not afford to wait until random mutation produces a resistant gene; we would seek to fabricate one. *If* we succeed, we would use it to produce a vaccine, and this vaccine would then be disseminated widely, once more abrogating natural selection and biological evolution. We might fail! But if we did — and herein lies the tragic irony of our transcendent human condition — we would have to face extinction with full consciousness: “awareness of death,” a noted feature of symbolic consciousness, made manifest in an especially telling manner.

A similar dystopian thought experiment could be worked out for the case of catastrophic climate change. Again, whether or not our response is principled and cooperative, vs. antagonistic and elemental, would help determine the probability of survival. But whatever path we take, it cannot involve reversion to pre-conscious biological selection. This is perhaps the existential moment: we are, indeed, condemned to consciousness, to choice — to freedom.

There is a common pessimistic thread in much current environmentalist discussion, including in some Marxist circles where apocalyptic moods have left a mark. This thread mounts a polemical assault on what it sees as naive belief in progress, a quality that is even to be found in Marx and Engels — who, after all, were in one sense true “Victorians.” The idea of human transcendence of, and distinction from, nature seems to suggest that ever-unfolding development of the productive forces is entirely non-problematic, and that progress toward communism is “inevitable.” Many writers (including, it must be said, the present one!) are tagged with this position, although in my experience very few acknowledge and “own” it. Whether or not this naive view has any adherents, however, it may be identified as *utopic determinism*: human prevalence over nature, and continuing social evolution in a progressive and harmonious direction, are inevitable — an optimistic teleology.

But — and here is the central point of this essay — there is *also* an opposite, pessimistic, teleology: a negative view with an implicit form, and again one that few would “own.” This is *dystopic determinism*: the belief that *catastrophe* is inevitable. Either nuclear war, or C3, or E-coli (or all three!) will ultimately undo human progress. Deep ecologists (“Put the metal back in the ground”), Derrick Jensen’s “End Game,” the “terrifying new math” of global warming, etc. etc., all point to a *necessary* end to the brief human experiment. In effect, if p is the probability of human survival and transcendence, we have the closed interval $0 \leq p \leq 1$, with the two extreme determinisms: $p=0$ (dystopic) and $p=1$ (utopic). My point is only that there is a double standard in the application of the “teleological” or “inevabilist” accusation, with $p \approx 1$ labeled “Victorian,” “naive,” and so on, and $p \approx 0$ appearing smart, chic, and, well, suitably postmodern.

Where p actually lies — whether closer to 0 or to 1 — we must leave to scientific debate, and to our efforts to secure the social foundations for the flourishing of science, and for a non-tragic way out from the present human condition. Two closing points. First, symbolic reference, at least in principle, provides us with a mode of adaptation that is faster than the fastest mutating virus. Second — and this point was under-appreciated, I think, when *Deep History* was written — the development of productive forces never takes place in a natural vacuum. There are always displacement effects, unintended consequences of our interventions, new challenges — and, therefore, an uncertain future.



ALEXANDER SAXTON, 1919–2012

We take note, sadly, of the death of Alexander Saxton, last August, at age 93.

Many of us at S&S were familiar with Saxton’s work as a novelist, historian, and trenchant left critic before we met him personally — although we were surprised to learn of the breadth of his contributions, as some of us were familiar with his historical works, *The Indispensable Enemy: Labor and the Anti-Chinese Movement in California*, *The Rise and Fall of the White Republic*, and *Religion and the Human Prospect* among them, while others knew him as a writer of fiction. His odyssey — from a privileged New York childhood to a chosen life as itinerant laborer, Communist and trade union organizer, to novelist, to a PhD from the University of California/Berkeley and a distinguished academic career — is a remarkable instance of crossing boundaries in a lifetime of personal and intellectual growth.

Saxton (Alex, as we came to know him) crossed our path first with an article, “Marxism, Labor and the Failed Critique of Religion,” which appeared in our July 2006 issue. One thing led to another: five book reviews, and another paper, “The God Debates and the Materialist Interpretation of History” (October 2009). What came to be his last contribution to S&S is a review article, “Terry Eagleton and Tragic Spirituality” (January 2012). I remember asking him recently if he would like to be Guest Editor for a Special Issue of S&S on religion (a subject of major concern to him in his later years). He politely declined, while gently informing me of his advanced age! At one point, I inquired a bit anxiously, after not hearing from him for a couple of months. His email reply, dated June 17, 2012, follows:

DAVID: Thanks for the msg. I am glad to hear from you. The “sort of a silence” was that I was in & out of the hospital in April & May for treatment of various side effects of a heart condition. By all means we will stay in touch. I don’t yet know what to expect of my own situation in the coming months. So I am hanging in hoping for the best. You too. With best wishes, ALEX

A unique and powerful voice, and a life well lived. Few can hope for more than that. We will miss Alex Saxton’s contributions, and his spirit.



IN THIS ISSUE

Examining the “other transition” — from ancient society to feudalism — historian Gary Blank presents a challenge to traditional historical materialist theory. Focusing on the demise of the Roman Empire, the distinct forms of succession in its western and eastern regions, and the entire system of class relations (including free and unfree peasants, slaves, landowners, urban proletariat, etc.), Blank argues that the classical Marxist categories (slave and feudal modes of *production*) are too blunt-edged to explain adequately the rich history of the “other transition”; in fact, there were, he suggests, two transitions, not one. The core of the problem lies in the “mode of production” concept itself. Placing the history of the transition from ancient society in terms of modes of *exploitation* is, in Blank’s view, a far more useful approach. This study continues a long tradition in S&S, going back to the now-historic “Transition Debate” of 1950.

Deepankar Basu (“The Reserve Army of Labor in the Postwar U. S. Economy”) presents a detailed empirical analysis, first building up a set of

careful alternative definitions and relating these to Marx's classical analysis. There are two results, which deepen our understanding of the neoliberal era and its crises: first, the relative size of the reserve army has risen in recent decades; second, relocation of production to low-cost areas, in the global South and East, now functions in the same way as did biased technical change in earlier stages of capitalist accumulation, as a means of recruiting the reserve army and disciplining labor to restore and maintain profit rates.

The IT revolution of recent times has opened a continuing debate about "cognitive commodities" and creative labor, and their conceptualization within Marxist theory. In his "The Place of Free and Open Source Software [FOSS] in the Social Apparatus of Accumulation," Daniel Ross explores one aspect of this transformation. Drawing upon, and revealing to the non-specialist, many of the intricate features of the open source movement and of present-day software creation, he concludes that, despite its apparent challenge to capitalist property ownership and power, FOSS is in many ways integrated into the process of capitalist accumulation, even while it exemplifies the continuing socialization of production and highlights fundamental contradictions between modern production and capitalist appropriation.

Charles Post's *The American Road to Capitalism* has been celebrated as a valuable study of the U. S. path of economic development, based on the general approach of Robert Brenner. Now, economic historian Daniel Gaido takes issue with Post's central thesis: that, following Brenner's account of English transition *via* self-transformation of landowner into capitalist, in the USA the role of landowner is taken by merchant-turned-land speculator, who was able to establish a monopoly on land shortly after the American Revolution. Gaido rejects this on empirical grounds, and also links his counter view to the classical Marxist analysis of development of capitalism in the United States.

Finally, this issue contains what we hope will be the first of many comments on our Special Issue, "Designing Socialism: Visions, Projections, Models," edited by Al Campbell, which appeared in April 2012. Mel Rothenberg's "Commentary on 'Designing Socialism'" presents several additional perspectives too numerous to summarize here. Perhaps one central point concerns the role of markets: Rothenberg questions the Special Issue contributors' tendency to dismiss markets, pointing to the historical necessity of market forms in what are inevitably long and complex transitions from capitalist (and precapitalist) societies. Like the feudalism-to-capitalism transition debate (*and* now the ancient-to-feudal transition debate!), the socialism discussion has become a tradition in *Science & Society*, one that only deepens our sense of the importance of Marxist theory for progressive movements, even in periods when that importance is not widely recognized.

D. L.