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ECONOMY AND ECOLOGY

Introducing Citation Classics and Foundational Works

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> t will be ironic," Raymond Williams (1980) once wrote, "if one of the last forms of the separation between abstracted Man and abstracted Nature is an intellectual separation between economics and ecology. It will be a sign that we are beginning to think in some necessary ways when we can conceive these becoming, as they ought to become, a single discipline" (p. 84). Indeed, there are few intellectual ironies as great as the contemporary conflict between economy and ecology. Both terms share the same original reference to the Greek *oikos* (household). *Economy* evolved from its earliest sense as household management (combining oikos with the Greek for management or *nomia*) to political economy and then to the modern sense of economics based on the market. *Ecology* (originally *ökologie* or *oecology*) was coined in the 1860s by the German zoologist Haeckel, who combined oikos with the alternative ending *logos* (discourse or systematic study). Although the concept of economy was used to define material relationships between human beings and between human beings and nature, centered on the market, the discipline of ecology became the study of plants and animals in relation to their habitats (Williams, 1983, pp. 110-111).

> Still, in the age of Darwin, ecology (or biology) and economics were often seen as running on similar principles; so much so that as late as the early 1930s influential writers like H. G. Wells and Julian Huxley saw no real conflict between the biological economics, which they saw as governing the natural world, and the human world of economics, which they described in their *Science of Life* as nothing other than "Human Ecology . . . the narrow and special study of the ecology of the very extraordinary community in which we live" (Wells, Huxley, & Wells, 1934, pp. 961-962). On one hand, they observed, "ecology is the extension of economics to the whole world of life." On the other, as Wells (1931) stated, economics itself was to be seen as merely "a branch of ecology . . . the ecology of the human species" (p. 35). In this view, even though economics had originated as a discipline a century or so before its kindred discipline of ecology, the former remained only a more specialized version of the latter: "Man," Wells and Huxley wrote, "is always beginning his investigations too close to himself and finding later that he must extend the basis of inquiry" (Wells et al., 1934, p. 961).

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Authors' Note: John Bellamy Foster, the founding editor of the Citation Classics and Foundational Works section of Organization & Environment, is now coeditor of the journal. Mary Mellor has replaced him as feature editor of this section.

This early sense of the closeness and compatibility of the fields of economics and ecology was rooted in a 19th-century Darwinian sense of economics as the survival of the fittest, which supposedly paralleled the workings of the natural world. Meanwhile, economic concepts such as producer and consumer were imported into ecology.¹ As ecology and economics developed as separate disciplines in the 20th century, however, they came to be understood as representing quite different systems operating under different principles. Ecologists work with ecosystems (or with the biosphere)-essentially closed evolutionary systems in which everything is seen as interrelated. In contrast, economics is affected by the fact that the economy, as currently constituted, is open on both ends-both with regard to resources (the "tap") and waste ("the sink"), relying on the ecology for its inputs and the disposal of its ultimate outputs (in the form of waste), but largely excluding such ecological conditions from its system of valuation and thus economic analysis. Rather than theorizing the relation between ecology and economics, orthodox economists preferred to treat the economy as a circular, mechanical, and essentially unchanging (albeit expanding) system, ignoring its dependence on conditions outside itself. One thing that all economists did agree on, however, was that the system was based on growth. Indeed, the capitalist world economy of today is geared above all to accumulation on a global scale, and thus continually affects the planetary ecology.

Hence ecology and economics are now seen as generally operating under antithetical principles: one concerned with natural limits, the other with the promotion of unlimited growth and oblivious to ecological limitations. As the ecological economist Kenneth Boulding once remarked, "Anyone who believes exponential growth can go on forever in a finite world is either a madman or an economist" (Olson, 1973, p. 3). Especially since the publication of Club of Rome's *Limits to Growth* in 1972, it has come to be widely recognized that at the heart of the modern predicament lies the conflict between ecological sustainability and an economic system geared almost exclusively to the promotion of production and profits. Our ecological problems, Rachel Carson warned in *Silent Spring*, are in large part a product of "an era dominated by industry, in which the right to make a dollar at whatever cost is seldom challenged" (Carson, 1962, p. 13).

In recent decades these concerns have given rise to the notion of "sustainable development," or the idea that economic development must be made compatible with ecological sustainability, at least to the point that the wealth (both economic and ecological) of future generations is not compromised. Yet this concept, which some have treated as "the solution to the ecological riddle," represents not so much a solution but the abiding hope in an age of global ecological crisis that the link between economic development and ecological degradation can be broken. Thus, although some have gone so far as to argue that "whereas the older generation of environmentalists claimed economic expansion inevitably ends in an ecological catastrophe, the new generation of thinkers explores the positive links between the two entities" (Berger, 1994, pp. 777-778), it would be more correct to argue that the conflict between economy and ecology now frequently takes the form of two opposing conceptions of sustainable development: one concerned above all with sustaining economic growth and established forms of economic and social organization; the other concerned with sustaining global ecology, necessitating radical changes in the constitution of economy and society. Although the conflict between economic growth (insofar as this involves the expansion of physical output) and the environment can never be entirely eliminated, this does not preclude qualitative development of socioeconomic relations and the enhancement of human welfare provided only that social reorganization reduces waste and redistributive measures decrease the inequity that drives the contemporary economic system. What this demands, however, is nothing less than an ecological and social revolution.

The problem becomes even more pronounced when viewed in terms of "the ecology of rich and poor" (Athanasiou, 1996). According to this perspective, global ecological problems arise not so much from demographic and technological forces, or even from the treadmill of production in some abstract sense, as from the social divisions that have produced a "divided planet" rooted in exploitation (Athanasiou, 1996). Hence recent years have seen a growing awareness of ecological inequality and environmental racism, leading to calls for "environmental justice." Such disparities are most obvious at the global level, with the population of the industrialized northern hemisphere-one fourth of the world's people- consuming about 80% of the world's goods and 60% of its food. The average North American uses approximately 40 times as much energy per year as the average person in the Third World. More than 1.3 billion people lack safe drinking water. Every year some 14 million children, mostly in the southern hemisphere-equal to about 10% of the children born annually-die of hunger (Athanasiou, 1996, p. 53; MacNeil, Winsemius, & Yakushiji, 1991, p. 6; World Commission on Environment and Development, 1987, p. 169). Similar discrepancies exist within countries as well. Everywhere the highest ecological and social costs of current patterns of development fall on the underprivileged sectors of society, whose members are oppressed on the basis of race, class, and gender.

Resistance to a world economy that has, in the words of the great U.S. preservationist Aldo Leopold (1949), reduced land (nature) to "a commodity belonging to us" rather than seeing it as "a community to which we belong" is an old story, part of a recurring battle that dates back to the early years of machine capitalism (and still earlier) (p. viii). Even before the word "ecology" was invented, and before the term "environment" gained its modern connotation, numerous figures fought for a sustainable relation to nature and against the excesses of a system devoted to creating boundaries between human beings and between human beings and nature, in the process of "undermining the original sources of all wealth—the soil and the worker" (Marx, 1976, p. 638).

Feminists, greens, and socialists, in particular, have all in their different ways been engaged in what is ultimately a common struggle. Feminists have shown the way human relationships and the human relation to nature have been distorted by patriarchy. Greens have undermined the false boundary between human society and nature. Socialists have exposed the exploitative reality of economic relationships.

Among those engaged in the long revolution to create a more humane and at the same time more ecological existence, we therefore find a wide array of Romantics, socialists, feminists, conservationists, and radical reformers. It is the purpose of the Citation Classics and Foundational Works section of this journal to explore the theory and practice of such historic and contemporary thinkers and activists, and their efforts to envision alternative forms of social, ecological, and economic organization that will help alleviate the age-old conflict between economy and ecology through the creation of a truly sustainable society.

NOTE

1. Science of Life, as Donald Worster indicates, stood at the crossroads between the old Darwinian ecology and what became known in the post-World War II years as the "new ecology": an ecological science modeled after "the forms, processes and values of the modern economic order" (Worster, 1977, pp. 293-294).

REFERENCES

Athanasiou, T. (1996). Divided planet: The ecology of rich and poor. New York: Basic Books.

- Berger, J. (1994). The economy and the environment. In N. J. Smelser & R. Swedberg (Eds.), *The handbook of economic sociology* (pp. 766-797). Princeton, NJ: Princeton University Press.
- Carson, R. (1962). Silent spring. Boston: Houghton Mifflin.
- Leopold, A. (1949). The Sand County almanac. New York: Oxford University Press.
- MacNeil, J., Winsemius, P., & Yakushiji, T. (1991). Beyond interdependence. New York: Oxford University Press.
- Marx, K. (1976). Capital (Vol. 1). New York: Vintage.
- Olson, M. (1973). Introduction to "The No Growth Society." Daedalus, 102, 1-14.
- Wells, H. G. (1931). The work, wealth and happiness of mankind. Garden City, NY: Doubleday.
- Wells, H. G., Huxley, J., & Wells, G. P. (1934). *The science of life*. Garden City, NY: Country Life Press.
- Williams, R. (1980). Problems in materialism and culture. New York: Verso.
- Williams, R. (1983). Keywords. New York: Oxford University Press.
- World Commission on Environment and Development. (1987). Our common future. New York: Oxford University Press.
- Worster, D. (1977). Nature's economy. New York: Cambridge University Press.