

Recognizing Overshoot: Succession of an Ecological Framework

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Abstract

William Catton's foundational book in environmental sociology, Overshoot, published over 30 years ago, provides a valuable conceptual framework for understanding human-environment interactions. Despite the importance of this work, over the past three decades, environmental sociology has drifted away from many of Catton's core concerns, especially his focus on natural limits. Reminiscent of the context in the 1970s following the Energy Crisis in which Catton wrote Overshoot, we now appear to be entering a new age of economic and environmental crises, where the ecological contradictions of modern societies and the verity of resource constraints grow ever more apparent. Given the re-emergence of crises similar to those which spurred Catton's work, we highlight some of Overshoot's most important conceptual contributions and argue that Overshoot deserves renewed attention, since it holds many insights that can help us to address the environmental and economic problems of the twenty-first century.

Keywords: *Environmental Sociology, New Ecological Paradigm, Overshoot*

Introduction

In much the same way that the Energy Crisis of the 1970s spurred public concern for the environment and provided momentum for environmental studies and activism, new environmental crises and the current economic downturn may similarly serve as a catalyst, bringing renewed attention to long-neglected ecological contradictions of modern societies. As the price of energy, particularly oil, has generally risen over the past decade and recaptured public attention, the reality of resource depletion and environmental degradation has reemerged in the public consciousness. Recent events, including the massive oil spill in the Gulf of Mexico and the

nuclear crisis at Fukushima Daiichi in Japan, have heightened public awareness about the environmental and social consequences of profligate energy and resource consumption. Continuing globalization, both of the economy and environmental crises, has made the tension between societies and the environment even more pressing and visible. All of this provides the context needed to redirect attention toward the material sources of our economic and social problems, presenting an important opportunity for environmental sociology.

Now that we appear to be entering an age of crisis, where limited resources, economic strain, and indeterminate risks are becoming unavoidable realities of daily life, the willingness of the public to question the status quo is on the rise. Drawing on this renewed attentiveness to the social and ecological contradictions of modern societies, environmental sociologists may help to redirect public and scholarly attention toward the social structural sources of these problems and point the way to necessary, though perhaps previously unimagined, changes that must occur if human societies wish to promote their own longevity. Unfortunately, it appears that environmental sociology has lost much of its original potency and sense of urgency despite its early momentum. Without a return to some of the guiding principles that initially led to its formation, it is unlikely that environmental sociology will resume its challenge against pervasive indifference to the environment or provide the impetus for the paradigm shift it once promised.

Here, we aim to help reground and reinvigorate environmental sociology by highlighting the contributions to our understanding of societal-environmental interactions made by early environmental sociologist William Catton in his book *Overshoot* (1980), a foundational work in the field. It is our contention that Catton provided a powerful framework for understanding the modern ecological crisis which contains insights often missing from contemporary discourse in environmental sociology. Recently, Catton renewed the themes he addressed in *Overshoot* with his latest book *Bottleneck*:

Humanity's Impending Impasse (2009b). Bottleneck is a valuable sequel to *Overshoot*, although it is not as revolutionary in the present context as *Overshoot* was in its time because knowledge of the ecological crisis has grown over the past three decades. *Overshoot* is a work of such importance that it is hard to improve on, and it contained such important insights that its value has hardly dimmed over the past three decades.

The rise (and fall) of environmental awareness

Greater awareness of the environment and support for environmental issues grew in the 1960s, peaked in the 1970s with the introduction of Earth Day, and started to decline in the 1980s (Buttel, 1987). In order to gain perspective on the rise and fall of environmental urgency that occurred during and since this time and to understand how it relates to environmental views held among the public and within sociology today, it is important to examine the early conditions that led to this change in orientation. Even though environmental awareness among the public was heightened following the 1969 Santa Barbara oil spill and the energy crises of the 1970's, environmental concerns had already begun to gain widespread attention through the publication and popularization of books such as Rachel Carson's *Silent Spring* (1962) and Paul Ehrlich's *Population Bomb* (1968). Not surprisingly, this period was also characterized by intensified academic interest in environmental issues. However, as oil prices dropped in the 1980s, much of the initial urgency and support for environmental policy change began to fade among the public as well as in academia (Buttel, 1987). Just as neoliberal ideas built on past delusions of unlimited growth regained hold over the public imagination and eventually extinguished much of the political will to make the necessary environmental commitments, a similar weakening of the will seemed to occur within the relatively new field of environmental sociology.

Initially, environmental sociology developed out of the desire to revolutionize social theory by recognizing ecological processes and incorporating them into explanations of social phenomena (Dunlap & Catton, 1979). Seeking to remove sociology's ecological blinders, environmental sociology represented a challenge to traditional theories and approaches central to mainstream sociology (Catton & Dunlap, 1978). Dunlap and Catton (1979, 243) described environmental sociology as "a distinct area of inquiry" separate from what they called the "Sociology of Environmental Issues," which used standard sociological approaches to explore issues related to the environment, such as studying the environmental movement or public perceptions of the environment, but not

taking into consideration the biophysical environment in its own right. Buttel (1987, 466) noted that "Environmental sociologists sought nothing less than the reorientation of sociology toward a more holistic perspective that would conceptualize social processes within the context of the biosphere.... [However, environmental sociology] has become more specialized, fragmented, and dualistic." Despite the challenge that environmental sociology initially presented to mainstream sociological thinking, environmental sociologists such as Buttel (1987) concluded that environmental sociology over its first decade had essentially made little to no impact on general social theory. Although articles examining the environment have appeared more recently in top sociology journals (e.g., Rudel, 2009; York, Rosa, & Dietz, 2003), most sociologists continue to neglect the biophysical environment in their development and/or testing of sociological theory. Rather than signaling a larger paradigm shift, environmental sociology instead became yet another category of specialization within the discipline.

Ever since its emergence in the 1970s, environmental sociology has focused on the connection between social and ecological systems. However, the way in which many studies in the field are framed today retains little resemblance to the frameworks used in the early works of the subdiscipline. As we will explain more below, a comparison of the foundational work in environmental sociology and more recent work indicates a pattern of disengagement from the overarching objectives set out early in the field's development. While certain foundational works and concepts have continued to hold sway within the field, the subdiscipline's general tone and orientation seem to have shifted, so that mainstream sociology, which has typically neglected the environment, has had a greater effect on environmental sociology than environmental sociology has had on mainstream sociology.

A new paradigm

Rather than submitting to conventional sociological thought, Catton's vision for environmental sociology presented a direct challenge to the dominant paradigmatic orientation of sociology. In a pair of foundational articles with Riley Dunlap (Catton & Dunlap, 1978; Dunlap & Catton, 1979), Catton helped to usher in a new way of thinking about the world that placed human society within its broader ecological context. The two authors identified a sharp distinction between what these authors called the New Ecological Paradigm (NEP), which emphasized the ecological embeddedness of societies and served as the foundation for environmental sociology, and the anthropocentric Human Exemptionalism Paradigm (HEP), which ignored the dependence of society on nature and was the implicit paradigm behind most sociologi-

cal theorizing and research. Catton extended this vision and provided additional insights in his next major publication — *Overshoot*. In this work, he emphasized the importance of adopting an “ecological mindset,” building on the idea of the NEP. This represented a major shift away from the nearly exclusive focus on social factors for explaining social phenomena then typical in sociology. In place of this, he advocated a significant change in the way social and ecological problems were framed and provided a new vocabulary designed to support this re-conceptualization.

Many of the ideas presented in *Overshoot* seem to have escaped notice among more recent generations of environmental sociologists. However, what has been lost only waits to be rediscovered. It is not too late to appreciate Catton’s original vision for environmental sociology or to restore the field’s former theoretical power. By reconsidering the broader significance of *Overshoot* and responding to the growing need for innovation and re-conceptualization in the field, environmental sociology may yet develop a distinctive theoretical approach and adopt a more fully realized “ecological mindset”.

Some early environmental sociologists only partially accepted the importance of viewing social processes through an ecological lens and, thus, served to distance some strands of research in the subdiscipline from the original vision for a sociological revolution. For example, right at the inception of the NEP, Buttel (1978) questioned whether environmental sociology represented a paradigmatic break from mainstream sociology, and, to some degree contra Catton and Dunlap, he advocated grounding environmental sociology in traditional sociological theory rather than ecological theory. Similarly, Schnaiberg (1980) distanced his neo-Marxian “treadmill of production” theory from human ecology, relying on more traditional concepts in social theory to explain environmental crisis, rather than drawing on ecological theory as did Catton. Particularly noteworthy is that both Buttel and Schnaiberg, while taking environmental problems very seriously, tended to use social facts to explain environmental conditions, but were more reluctant than human ecologists to use environmental facts to explain social conditions. Nonetheless, unlike many mainstream sociologists, prominent early environmental sociologists understood that all societies were fundamentally dependent on ecological processes and natural resources for their survival and that modern societies were undermining environmental sustainability.

Even though to some degree over the past three decades mainstream sociology has moved away from a strict human exemptionalism, ironically some work in environmental sociology continues to maintain a distance from focusing on the natural environment. Soon after the field was founded, environmental sociology was divided between realists, who took

environmental problems as objectively existing, and social constructivists, some of whom saw environmental problems as socially constructed and not reflecting objective environmental conditions (Dunlap, 2010; York & Clark 2010). While some scholars stuck to one extreme or the other of these two positions, most environmental sociologists came to a sensible compromise, recognizing both the reality of environmental problems and the way public understanding of them is, to some degree at least, socially constructed (Dunlap, 2010). Nonetheless, although the tension between these positions has ebbed, it has been replaced by a divide between what Dunlap (2010) referred to as “agnosticism” and “pragmatism” with regard to environmental problems. Environmental agnostics, while not necessarily denying the reality of anthropogenic environmental change, are not interested in examining actual environmental conditions, but rather in examining *discourse* about the environment and the socio-cultural meaning made through this discourse (McNaughten & Urry, 1998; Yearley, 2005). This approach clearly falls under the pre-NEP sociological tradition, in that it does not incorporate the natural world into analyses, rather focusing on social phenomena in isolation from the environment (e.g., discourse and the construction of meaning).

Those who continue to neglect examining the actual environment, instead focusing on discourse about the environment and the meaning humans make of nature, are not the only counter-ecological writers. There are also those of an ostensibly realist bent who, while acknowledging the reality of environmental problems, deny the *severity* of the modern ecological crisis and/or maintain a faith that technological advance and modernization can transcend the crisis. Particularly notable on this front is “ecological modernization theory,” which has gained prominence over the past two decades. Characterizing this perspective, leading ecological modernization theorist Arthur Mol (1996, 313) writes, “ecological modernization theory identifies modern science and technology as central institutions for ecological reform (and not in the first place as the culprits of ecological and social disruption).” Ecological modernization theory has tended to direct environmental sociology away from the NEP and back toward the HEP, since it challenges the fundamental critique of modernity offered by Catton and others and advocates further modernization, economic development, and technological control of the environment to overcome ecological crises (York & Rosa 2003; York, Rosa, & Dietz, 2010). For example, Mol and Spaargaren (2004, 261) declare, “the irrelevance of ‘more’ or ‘less’” in opposition to claims that the scale of production and consumption needs to be curtailed to address environmental problems. This is a position clearly counter to Catton’s, since it denies natural limits and the inherently unsustainable nature of economic and population growth.

Additionally, ecological modernization theorists, while possessing a clear faith that science can help to solve our problems, have oddly flirted with the reality-denying elements of some anti-positivist positions. For example, Mol and Spaargaren (2005, 94-95) declare “the limitations of empirical studies in closing larger theoretical debates” and largely reject the use of hypothesis testing based on rigorous empirical analysis for assessing the forces driving environmental degradation. Rather, they advocate interpretive approaches that utilize empirical evidence in a loose fashion. They have also challenged the relevance of “natural science ‘empirical facts’ ” and mathematical analyses applied to assessing socio-environmental problems (Mol and Spaargaren 2004, 262). This skepticism about scientific methodology led Dunlap and Marshall (2007, 339) to suggest that Mol and Spaargaren are taking a “postmodernish” epistemological stance, highlighting a fundamental contradiction in ecological modernization theory, since it touts the potential of science to *solve* environmental problems while denying the potential for science to help us *understand* the social drivers of these problems. Thus, ecological modernization theory not only moves away from the substantive and theoretical claims of Catton, it also is in epistemological tension with his work, since Catton to a large degree relied on the natural sciences, particularly ecology, to give needed guidance to sociology.

With the emergence of ecological modernization theory and environmental agnosticism, it is clear that environmental sociology has lost much of its original direction and potency. If environmental problems are to be seriously addressed, maintaining the ecological core of environmental sociology is very important. Of course, the NEP should not be restricted to environmental sociology. This paradigm holds significance independent of environmental sociology and sociology as a whole, and exists at a more general level. It is, therefore, worthy of standing on its own merit since it is capable of generating a diversity of research agendas. However, regardless of the power this paradigm holds for sociology and environmental sociology, it is not the intention of ecologically grounded theory to ignore the power of social structures and processes, but rather, to explore environmental as well as social interactions that affect social behavior and processes. In *Overshoot*, which is grounded in and exemplifies the NEP, Catton drew attention to the dire consequences awaiting human society if we continue to ignore our connection to (and place within) the larger environment. It will be a travesty if sociology, a discipline charged with studying human societies, continues to overlook the broader context of human activity.

Although *Overshoot* gets only limited attention within contemporary environmental sociology, there have been sev-

eral articles providing support to Catton’s vision. For example, Murphy (1994) argues for a shift in classic sociological thinking toward a more ecologically grounded sociology and away from an overreliance on a purely social constructivist framework. Freudenburg et al. (1995) similarly challenge the tendency of mainstream sociology to create a false dichotomy between nature and society, emphasizing the importance of a more holistic approach. More recent examples include the work of York et al. (2003), which points to the shortcomings of ecological modernization theory. By noting societal-environmental imbalances, their paper reinforces the need for the ecological approach. A symposium in *Organization & Environment* (York, 2008), while not focused on *Overshoot*, examined important contributions of Catton and Dunlap which point to the value of their intellectual vision. In a retrospective look at Catton’s work, Freudenburg (2008, 2009) notes the importance of his contributions and discusses his work’s continuing influence.

Much of *Overshoot*’s continued influence is most visible in academic work outside the bounds of environmental sociology. As Goldman and Shurman (2000) emphasize in their article, recent interdisciplinary work continues to challenge the “nature/society divide” in a way that most contemporary work in sociology does not. In fact, Catton’s ideas have received recognition from a number of environmental advocates in diverse, though related, fields of study. In a recent search using Google Scholar, there were over 400 citations listed for Catton’s *Overshoot*. Among these, many were connected to disciplines outside of sociology representing the fields of environmental science, economics, political science, and public health. A similar search using the ISI Web of Knowledge yielded over 150 citation matches including articles from these fields as well as anthropology, biology, bioethics, history, and psychology. Clearly, Catton’s work has received a great deal of recognition outside of sociology. It is noteworthy that the “ecological footprint” concept was influenced by *Overshoot*. The ecological footprint has become one of the central concepts of environmental studies and discourse and was developed out of Catton’s discussions of “phantom carrying capacity”, “ghost acreage”, and the core concept of “overshoot” (Wackernagel & Rees 1996; Wackernagel, Schulz, et al., 2002; Wackernagel, Monfreda, et al., 2004). More recently, a book review of *Overshoot* was published in a prominent public health journal (Weiss, 2009). In his review, Weiss refers to *Overshoot* as “one of the most important books ever written.” While *Overshoot* continues to hold wide appeal outside of sociology, it remains unclear why its lessons have not gained more attention within Catton’s own academic discipline.

An ecological mindset

Precise and descriptive terminology is important in any field of inquiry, and sociology has provided many important terms and concepts that clarify analyses, arguments, and discussions. Well-chosen terminology can help to clarify meaning and frame thinking about the problem at hand. The names ascribed to key concepts and theories may shape hypotheses and even be used to define research agendas. While terminology and conceptual frameworks used in specific fields evolve over time, it is often the case that foundational ideas persist and continue to provide direction to contemporary work. For environmental sociology, the persistence of foundational ideas continues to be seen in the use of the HEP/NEP distinction to frame current studies. Sometimes this framing is explicit, but more often it is implicit. However, the HEP/NEP distinction on its own does not offer a clear or comprehensive framework for discussing subjects of interest to environmental sociologists. In re-examining Catton's early extension of the NEP in *Overshoot*, a clearer conceptual perspective can be discovered. Catton, himself, has recently addressed the need to move current thinking toward a new conceptual framework. In his recent article (Catton, 2009a) and in *Bottleneck* (Catton, 2009b), he revisits the importance of some of the key concepts first presented in *Overshoot* and emphasizes the urgency of adopting a new understanding of socio-environmental relations within sociology.

In *Overshoot* he vividly outlined an ecological approach to viewing social problems and shed new light on contemporary sociological issues from political tensions to global inequality. Further, he introduced a number of valuable concepts that may be used to reframe sociological thinking and help produce an "ecological mindset". Expanding on ideas borrowed from ecology, Catton created original concepts that reflect the magnitude of contemporary social and environmental problems and emphasize the consequences of continued reliance on unsustainable levels of human consumption. Through the use of these new concepts, he is able to draw attention to the historical course of human societies in relation to their environment and outline the modern condition of ecological and social systems.

Perhaps the most significant term coined by Catton is employed in the title of his book — *overshoot*. This term refers to growth beyond sustainable environmental limits or, put more precisely:

OVERSHOOT: (v.) to increase in numbers so much that the habitat's carrying capacity is exceeded by the ecological load, which must in time decrease accordingly; (n.) the condition of having exceeded for the time being the permanent carrying capacity of the habitat.

Central to this concept is the implication that human societies will no longer be able to ignore the ecological imbalance they have created and will at some point be forced to abandon the high consumption levels to which countries of the globalized North have become accustomed. Catton's book, like many books of the same era, serves as both a lesson and a warning about the long-term consequences of ecological ignorance.

In many ways, Catton sees human "progress" as a process by which we have largely become victims of our own success. Much of this "success" is tied to the environmental abundance provided through early European conquest. Rather than readjusting as resources became less available locally, European nations were able to actually increase their consumption levels as well as their expectations for the future at a scale many times greater than the actual carrying capacity of their immediate environment. This expectation of abundance led to what Catton refers to as the Age of Exuberance:

AGE OF EXUBERANCE: the centuries of growth and progress that followed the sudden enlargement of habitat available to Europeans as a result of voyages of discovery; a period of expansion when a species takes exuberant advantage of the abundant opportunities in an eminently suitable but previously inaccessible environment.

Early European expansion laid the foundation for a collective belief in limitlessness, an expectation only amplified with the settlement of North America and the dawn of the industrial revolution. However, as the forces of globalization initially helped to maintain this sense of exuberance among more affluent nations, the ramifications of peak oil and resource depletion might at last begin to erode this false confidence. At the time of *Overshoot*'s publication in 1980, domestic oil extraction in the United States had already passed its peak, contributing to the energy crises of the 1970s. While these crises raised awareness about the consequences of fossil fuel dependency and inspired the popular environmental movement, this awareness did not last long as *global* oil supplies helped (temporarily) fill the gap in availability of domestic sources of petroleum. Americans were able to resume high levels of consumption, further driving societies into overshoot. Through *Overshoot*, Catton hoped to draw attention to the perils of fixating on past success while overlooking basic ecological constraints on continued growth.

By seeking to extend extractive capacity beyond their immediate borders, affluent nations have become increasingly tied to the resources of distant nations, relying on remote sources to meet increasing demand for agricultural products and fossil fuel. This dependence on external resources is sometimes referred to as "ghost acreage," a term crafted by food scientist Georg Borgstrom (1965) and discussed in some

detail in *Overshoot*. Connecting with this idea, Catton accounts for the resulting consequences of reliance on ghost acreage in his discussion of phantom carrying capacity:

PHANTOM CARRYING CAPACITY: illusory or extremely precarious capacity of an environment to support a life form or a way of life; that portion of a population that cannot be permanently supported when temporarily available resources become unavailable.

As the term implies, the progression towards increased dependence on non-renewable natural resources to maintain (or enhance) modern lifestyles can only exist as long as the supply of natural resources remains at a level sufficient to meet demand. While societies continue to grow and move toward increased consumption levels, they become more and more reliant on natural resources that are only available temporarily. Fossil fuel is one of the key resources allowing high levels of consumption and its continued extraction already appears to be in jeopardy. Peak oil projections indicate that the age of cheap oil is coming to an end and soon we will no longer be able to rely on the ability of fossil fuel to temporarily expand our productive capacity. This threatens the way of life that many societies have adopted and suggests the future (and very existence) of human societies is increasingly tenuous. To answer the question of how we have come to this point in the first place, Catton offers yet another useful concept:

PROSTHETIC DEVICE: in medical practice, an artificial substitute for a part of the body (as, for example, an artificial limb); by extension, any artificial device or any other thing that serves a function some organ would otherwise serve, or enables an organism to do something it could not otherwise do without having developed a special organ for that purpose.

To aid in the efficient consumption of natural resources, human societies have come to depend on a variety of tools that Catton refers to as “prosthetic devices”. In our use of such tools, he describes how we have essentially become victims of our own success. That is, human societies have been able to grow beyond the natural limits of the environment in a way that other species have not, due to various technological innovations. According to Catton, this growth differential is so vast that it merits a new name for our species — *Homo colossus*:

HOMO COLOSSUS: originally the gigantic statue of Apollo at the entrance of the harbor of Rhodes; hence, any gigantic person or thing; in this book, a

human being equipped with tools or apparatus that greatly enlarge the resource demands and environmental impact of that organism.

By relying on tools designed to enhance our natural abilities, we have pushed back natural barriers to growth and experienced unprecedented success. Even as overall population growth has begun to level off in many developed nations, consumption levels continue to experience dramatic growth around the world (Foster, Clark, & York 2010). Whether we choose to acknowledge it now or not, our short-term success has come at a very high price. The continued spread and growth of “*Homo colossus*” promises irreversible consequences, potentially undermining our very survival.

These are just a sample of the important concepts presented in *Overshoot*. Catton had much to say in this classic work that continues to hold relevance for contemporary sociology. Perhaps more than anything, the ecological framework (NEP) demonstrates the urgency of the human condition. It draws needed attention to misconceptions that have endured over time despite the fact that they are extremely detrimental to society and its long-term success. If sociologists embraced Catton’s ideas, many of these false perceptions could be more fully revealed and challenged.

However, *Overshoot* continues to lack widespread attention in sociology and, as a result, an absence of ecologically grounded understandings of society persists. Perhaps this is due, in part, to the persistence within mainstream sociology of commitment to the primacy of social facts. Catton’s use of interdisciplinary terminology may also face resistance within sociology since it incorporates concepts first introduced in other fields (e.g., carrying capacity) and, therefore, is thought to threaten the integrity or autonomy of the field as a whole. In other words, the reliance on classic sociological traditions, rather than challenging them, is thought to help sociology remain a distinct/separate (rather than interdisciplinary) field of study. From this point of view, the revolution in sociological thinking that Catton envisioned is imagined to threaten sociology’s very existence.

Of course, it seems natural to expect disciplinary (and sub-disciplinary) fragmentation as a field of study matures and as competition grows in the quest for specialization. This trend is particularly troubling, however, when considering the overarching objectives of environmental sociology. How might we expect to successfully identify or address wide-scale environmental consequences of continued growth if we limit our perspective to just one or another particular corner of the conversation? Clearly, a more holistic approach that resonates within mainstream social theory and also breaks down the boundaries between various social and environmental disciplines is sorely needed.

Return to roots

Thirty years after Catton's classic work was published, a rediscovery of the ideas he presented seems long overdue. By fully considering the ecological realities of our situation and actively applying the conceptual framework he suggested sociology (and society) may benefit greatly. Developing an ecological mindset toward contemporary social problems would provide theoretical power to the work of environmental sociologists and challenge popular ideas of unlimited growth. It would also serve to address the conceptual gap that persists within most sociological research.

By seriously reconsidering the importance of *Overshoot's* message and recognizing larger connections between human society and the natural environment, the diverse and fragmented field of environmental sociology stands to gain theoretical coherence. Taking another, deeper look at Catton's work may also prove useful in efforts to adopt a more holistic theoretical framework that will guide sociologists and other researchers toward a more cohesive, yet interdisciplinary, approach to environmental studies. It is time to look beyond the confines of our own preferred areas of specialization within sociology, environmental sociology, and related disciplines and develop a more comprehensive focus that incorporates broader ecological insights.

Recent events may provide the necessary context to address the misguided perceptions and practices that have encouraged unsustainable increases in the consumption patterns of modern societies. As Catton's work has suggested, the drawdown method of growth simply cannot go on indefinitely. However, it remains unclear how much longer "Homo colossus" will continue to ignore the signs of its potential collapse. Will larger patterns of environmental destruction continue to go largely unnoticed or unaddressed? As oceans rise, freshwater supplies dwindle, forests fall, species go extinct, and fossil fuels become less available on a global scale, will attempts be made to curb consumption or will it take something else to capture the long-term attention of the public? Perhaps a tragedy of the magnitude of the recent Gulf oil spill, the Fukushima nuclear disaster, or some other equally horrifying environmental catastrophe will finally lead society to question these ecologically irresponsible practices. Of course, it seems disturbingly possible that continued faith in unlimited growth and technological innovation will lead to similarly risky scenarios. In any future scenario, the global scale of contemporary environmental destruction certainly cannot be avoided indefinitely. However, through a return to the theoretical roots of environmental sociology, the larger connections between society and environment can be more effectively conveyed, conceivably leading to a more balanced

approach to both environmental studies and societal-environmental relations. For all of these reasons, environmental sociology and related disciplines should seek to rediscover the message in *Overshoot* and actively pursue a cohesive theoretical direction that challenges the assumptions that drive environmentally destructive behaviors and threaten humanity's very survival.

Endnote

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