NATURE, SOCIOLOGY, AND THE FRANKFURT SCHOOL

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ABSTRACT

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Through a systematic analysis of the works of Max Horkheimer, Theodor W. Adorno, Herbert Marcuse, and Erich Fromm using historical methods, I document how early critical theory can conceptually and theoretically inform sociological examinations of human-nature relations. Currently, the first-generation Frankfurt School's work is largely absent from and criticized in environmental sociology. I address this gap in the literature through a series of articles. One line of analysis establishes how the theories of Horkheimer, Adorno, and Marcuse are applicable to central topics and debates in environmental sociology. A second line of analysis examines how the Frankfurt School's explanatory and normative theories of human-animal relations can inform sociological animal studies. The third line examines the place of nature in Fromm's social psychology and sociology, focusing on his personality theory's notion of "biophilia."

Dedicated to 바다. See you soon.

ACKNOWLEDGEMENTS

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KEY TO ABBREVIATIONS

EMT: Ecological modernization theory

HEP: Human exemptionalism paradigm

NEP: New ecological paradigm

INTRODUCTION

Overview, Aims, and Methodology

"There is a universal feeling, a universal fear, that our progress in controlling nature may increasingly help to weave the very calamity it is supposed to protect us from."

Theodor W. Adorno, *Negative Dialectics* (1966:67)

"The history of man's efforts to subjugate nature

is also the history of man's subjugation by man."

Max Horkheimer, *Eclipse of Reason* (1947:105)

DISSERTATION SYNOPSIS

The overarching research goal of my dissertation is to demonstrate how the theories developed by those associated with the Frankfurt Institute of Social Research—specifically Max Horkheimer, Theodor W. Adorno, Herbert Marcuse, and Erich Fromm—can be used to conceptually and theoretically inform sociological examinations of human-nature relations. My research goals were: (1) to contribute to the advancement of environmental sociology by uncovering how critical theory[1] can address contemporary debates, topics, and issues in environmental sociological theory; (2) to contribute to the advancement of animal studies by analyzing how critical theory addressed the animal question; and (3) to outline the place of nature in Erich Fromm's social psychological and sociological theories, paying particular

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[1] Critical theory is a term used to refer to a wide range of normative theories that are not examined in my dissertation. For convenience, the terms "Frankfurt School" and "critical theory/theorists" only signify the theorists and theories developed by the "first-generation." Lengthy analysis of the second-generation of critical theory, epitomized by Jürgen Habermas' thought, was excluded from my dissertation to limit the amount of content explored. However, insights regarding Habermas' potential contributions are addressed in the Conclusion.

attention to his theory of biophilia. I have produced three article-length chapters, summarized here:

(1) The first chapter argues that Horkheimer, Marcuse, and Adorno can aid environmental sociology's progress with novel ideas, hypotheses, and conceptualizations. Horkheimer, Adorno, and Marcuse persistently tied the domination of nature to the domination of human beings; a theme reiterated in their discussions regarding instrumental rationality, science and technology, capitalism, and ideology. Further, critical theory had an underlying normative goal of harmonizing society's relationship with nature. All of these topics are of current interest in environmental sociology yet the insights of the Frankfurt School are largely absent from or critiqued in environmental sociological literature. With environmental sociology's criticisms of the Frankfurt School in mind, I demonstrate that critical theory can conceptually inform sociological examinations of societal-environmental relations and address contemporary debates and issues in environmental sociological theory. Continuing to neglect over forty years of scholarship that made nature an important component of social theory is untenable.

(2) The second chapter argues that, well before the emergence of the "animal question" in the now flourishing field of animal studies, the first-generational Frankfurt School theorized and problematized society's troubling relationship with the rest of the animal kingdom. Early critical theory explored the various forms of "unrelenting exploitation" animals have experienced in human society and maintained that the domination of animals is intimately linked to the domination of human beings, especially of women and racial and ethnic minorities. They criticized German idealism and Judeo-Christian thought for instrumentalist attitudes toward animals, and were committed to extending

compassion to animals. Horkheimer, Adorno and Marcuse argued that women and animals experienced parallel forms of domination and, as co-sufferers, women may need to play a central role in protecting animals from the horrors of modernity. The Frankfurt School provides animal studies scholars a theoretical framework for fruitful sociological examinations of human-animal relations and challenge those engaged in animal studies to make normative commitments in their scholarly work.

(3) The third chapter argues that Erich Fromm's work provides a theoretical foundation for a comprehensive and normative theory of human-nature relations that contains psychical, social, economic, and ethical components. Fromm's system of thought was rooted in understanding humanity's effort to establish meaningful relations with the natural world and how socio-economic systems mediate this endeavor. His normative theory maintained that society must develop a non-destructive relationship with the environment by fostering and perfecting the human potentiality of *biophilia*—a thorough love of living beings. He argued that biophilia will not become the prevailing *character structure* until society is capable of meeting three prerequisites for human flourishing: security, justice, and freedom. Because Fromm's social-ecological and ethical insights were partially rooted in humanism and Talmudic studies, he forces environmental scholars to rethink the Judeo-Christian and humanistic traditions, two pillars of Western thought often criticized in environmental literature (including his former colleagues).

Before presenting these results in detail, I provide relevant background information to position my dissertation in conversation with environmental sociology, animal studies, and critical theory. Concise overviews of the development of environmental sociology, environmental sociological theory, and critical theory are presented. I then show, with a few

exceptions, that environmental sociologists have either ignored or criticized the Frankfurt School's potential for enlightening environmental sociology. Following, I explain the revised historical methodological procedures used to document critical theory's contribution to environmental sociology and animal studies.

THE EMERGENCE OF ENVIRONMENTAL SOCIOLOGY

In the 1960s and 1970s, a series of events took place that increased the need to rethink humanity's relationship with the natural environment. The most prominent events included the growing concerns surrounding environmental degradation, the international and governmental attention to environmental problems, increased public support for environmentalism, the establishment of Earth Day, and the publication of books such as Rachel Carson's *Silent Spring* (1962) and the Club of Rome's *The Limits to Growth* (1972). Physical and natural scientists, traditionally concerned with developing and aiding industry in extracting resources from the environment (production science), began to develop models to measure the often negative impact industry had on the environment (impact science) (Schnaiberg 1980). These events also brought an unexpected group of academics into the conversation concerning natural limits, pollution, and resource depletion (sociologists) (Dunlap and Rosa 2000).

The discipline of sociology has historically focused almost exclusively on (human) social interaction, (human) social behavior, and (human) social organization. Due to this restrictive categorization and history, especially in post-Second World War American sociology, Catton and Dunlap (1978, 1980; Dunlap and Catton 1979) argued that sociology was unprepared to investigate new environmental concerns as the discipline was largely anthropocentric, studying human beings as if the biophysical environment was totally unaffected by human behavior or

vice versa. Sociology at large was said to have suffered from the Human Exemptionalism

Paradigm (HEP)—an anthropocentric conceptual framework in which humans were viewed and

studied as exempt from the global ecosystem—which some sociologists hoped to replace with

their environmentally-conscious, New Ecological Paradigm (NEP) (Catton and Dunlap 1980).

Straightforwardly, Dunlap and Catton declared that sociology ought to include the natural

environment in its investigations and formally established the subfield of environmental

sociology (the study of "societal-environmental interactions") to do so.

Though Dunlap and Catton's criticisms focused upon post-Second World War American

sociology, their call soon led to renewed interest in sociology's classical foundations.

Environmental sociologists began rethinking classical insights for developing a new, though

classically-rooted, NEP. Examinations of classical sociological theory received a considerable

amount of attention by environmental sociologists (for overviews, see Buttel et al. 2002; Buttel

and Humphrey 2002). Theoretical models and explorations based in Marxian (e.g. Anderson

1976; Schnaiberg 1980; Benton 1989; Dickens 1992; O'Connor 1998; Foster 1999; Clark and

York 2005), Durkheimian (Catton and Dunlap 1978; Martell 1994), Weberian (West 1984;

Murphy 1994; Foster and Holleman 2012), and Meadian (e.g. Greider and Garkovich 1994)

sociological traditions have developed. The resultant environmental sociological scholarship is

intriguing and novel. However, unlike classical sociological theory, mid-twentieth century

sociological theory—perhaps due to Catton and Dunlap's criticisms—has since received very

little attention in environmental sociology, excluding a few essays in Dunlap et al.'s (2002)

edited, *Sociological Theory and the Environment* (see Papadakis 2002; Roberts and Grimes

2002; Wehling 2002). In particular, a once very influential group of social theorists of the mid-

twentieth century[2] are often overlooked in environmental sociological literature: the Frankfurt School. This is unfortunate because a central organizing component of their social theory, though often neglected (even in the new subfield of environmental sociology), is their theorization and problematization of society's relationship with nature.

THE FRANKFURT SCHOOL AND THEIR CRITICAL THEORY

In the early 1920s, a young and wealthy Marxist named Felix Weil established the Institute of Social Research in Frankfurt, Germany (for a comprehensive history of the Frankfurt School, see Wiggershaus 1994; cf. Jay 1973). The purpose of the Institute was to promote and further Marxist theory and research since Weil wished to bestow the Institute to a future, hoped-for German socialist state. Weil's plans were never realized and the Institute took on a life of its own soon after its inception. The most influential and well-known first-generation members of the Institute were Horkheimer, Adorno, Marcuse, Fromm (who left the Institute in 1939), and Walter Benjamin (an outside member who committed suicide during an escape from Nazis in 1940). Although there was enough theoretical diversity within this group that defining it as a coherent "school" of thought is problematic (Wheatland 2009), the group of thinkers associated with the Institute is popularly referred to as the Frankfurt School.

In 1931 Max Horkheimer ([1931] 1993) gave his inaugural address as the director of the Institute. He called for interdisciplinary research to bridge social science and philosophy to generate ideas that could guide the development of a more rational and just society. This

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[2] I use "mid-twentieth century" loosely. The earliest Frankfurt School essay cited was written in the early 1930s (which could arguably be conceptualized as classical due to its pre-Second World War status) and the latest work cited was published in the mid-1970s (which could arguably be conceptualized as contemporary). That is, one could argue early critical theory spans late classical, midcentury, and contemporary sociology. For convenience, the period in which the first-generation formulated critical theory (the early/mid-1930s through the early 1970s) is signified by "midcentury."

inaugural speech laid the foundations for what was later termed "the Critical Theory" (e.g. Marcuse [1937] 1968; Horkheimer [1937] 1972b). Following in the footsteps of their greatest influence, Karl Marx, the critical theorists argued that social theory should be practical, critical, and normative. In addition to Marx's influence, the Frankfurt School incorporated insights from a vast range of thinkers, including, Sigmund Freud, Max Weber, George Simmel, Georg W. F. Hegel, Friedrich Nietzsche (especially in Adorno), Arthur Schopenhauer (especially in Horkheimer), and Martin Heidegger (especially in Marcuse), among many others. The seemingly contradictory amalgamation of influences as well as their contempt for the economic and political systems of their time resulted in a sizeable canon of radical, sometimes abstruse, and often pessimistic (see Anderson 1976) critiques of what they considered to be a "rationalized, automated, totally managed world" (Horkheimer [1968] 1972:vii).

CRITICAL THEORY'S EXCLUSION FROM ENVIRONMENTAL SOCIOLOGY

Early critical theory played little or no role in environmental sociology's development. This is not surprising, for two reasons. First, early critical theory's influence on American sociology waned considerably by the early-1980s, the same period in which environmental sociology was being formally established and attempting to legitimize itself. Van den Berg's (1980) harsh criticisms of the "Frankfurt philosophers" and their influence on American "flower power" academics are representative of the perplexed and condescending distaste many sociologists felt for the "dead" (Bottomore 1984:76) "paradigm that failed" (Greisman 1986:273) at the time. Second, when contemporary American sociologists still evoke the Frankfurt School's work it is usually for its critique of positivism (e.g. Marcuse [1941] 1960:323ff ; Adorno [1969] 1976) and early theorizations of an approaching consumer society (e.g. Marcuse 1964; Horkheimer and

Adorno [1944] 1969:120ff; Adorno 1991), overlooking their social-ecological insights in the process.

In addition to being an important foundation for two classic lines of analysis in social-environmental thought (Leiss 1972; Bookchin 1982a), the social-ecological contribution of the Frankfurt School has been recognized, explored, and debated by environmental philosophers (e.g. Vogel 1996; Wilding 2008), green political theorists (Balbus 1982: ch. 7; Eckersley 1992:107-18; Dobson 1993; Biro 2005:117-196; 2011; Barry 2007:87-92), ecofeminists (Salleh 1988; Mills 1991), and the Marxist geographer, David Harvey (1996:133-39). Yet their environmental contribution has been ignored and overlooked in sociology, excluding a few affirmative examinations (Aronowitz 1981:46-65; 2003:196-7; Wehling 2002).[3] The absence of critical theory in environmental sociology is typified by a statement made by a group of leading environmental sociologists, including Frederick Buttel, Peter Dickens, and Riley Dunlap. Here, the Frankfurt School is swept aside as an afterthought with Parsons' natural environment-free action and systems theories:

> midcentury sociological theories could in some sense be viewed as more innocent
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> of environmental phenomena than were the major classical theories … Parsons,
>
> for example, almost never referred to nature or the natural world, and when he did
>
> it was usually to make the observation that such phenomena lie largely outside the
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> arena of sociological analysis. Essentially, the same observation could be made
>
> about the major Frankfurt School figures such as Horkheimer, Benjamin, Adorno,
>
> and Marcuse (Buttel et al. 2002:12).

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[3] I exclude Walter Benjamin from my analysis because Wehling (2002) has already coherently clarified Benjamin's insights for environmental sociology.

When the critical theorists are not disregarded, they receive sometimes swift criticisms from classically-oriented Marxist environmental sociologists. John Bellamy Foster claimed that from the 1930s until the 1970s Marxist theorists, unlike select earlier Soviet writers such as Bukharin ([1921] 1969:104-129), "tended to ignore ecological issues" (Foster1999:395). Although he acknowledged that the Frankfurt School developed an "'ecological' critique" he had concerns about its usefulness (Foster 2000:245), as do Richard York and Brett Clark. These scholars argue that the Frankfurt School offers few social-ecological insights, or, "genuine ecological insights were rare" in their work (Foster 2002:80), for the following interrelated reasons: (1) their ecological insights were "largely philosophical" (Foster 1999:395); (2a) they rejected "empirical measurement, operational definitions, and quantitative analysis" (i.e. science), making analysis of natural processes unfeasible (York and Mancus 2009:131; cf. York and Clark 2010:476); (2b) they did not understand or incorporate ecological science (Foster 2000:245); (3) they had an "idealist bias" that marked an "antimaterialist" or "idealist turn" in Western Marxism (York and Mancus 2009:131, 145) (York and Mancus 2009:131);[4] (4) their social ecology was a vestige of romanticism (Foster 2000:245); and (5) the nature discussed by the critical theorists, specifically by Horkheimer and Adorno, "was almost always human nature" (Foster 2002:80).[5]

Criticisms (2a) and (3) demand considerable nuances. Concerning (2a), York and Mancus (2009:131) commended the Frankfurt theorists for uncovering the limits of naïve empiricism and positivism and, concerning (3), they were not implying that the Frankfurt School

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[4] There is another, less important critique related to this general criticism: critical theory supposedly led to postmodernism and poststructuralism (York and Mancus 2009; York and Clark 2010). For example, "critical theory led to important insights regarding the connections between power and knowledge. But this [Hegelian] turn, which led to the emergence of poststructuralism and postmodernism, was ultimately misguided" (York and Clark 2010:477; cf. York and Mancus 2009:129). It is outside the confines of this essay to address this critique fully, or its implications for environmental sociology. I include a couple of footnotes that draw attention to the most important differences between critical theory and the other two traditions.

[5] All of the listed criticisms of the Frankfurt School seem to be specifically leveled at Horkheimer and Adorno, although the term "Frankfurt School" and "critical theory" are commonly used.

reverted to a thorough idealism that resulted in a series of Fichtean treatises. They accurately stated that the Frankfurt theorists "were not necessarily rejecting a materialist approach to the natural world, but rather the application of mechanistic and reductionistic methods to analysis of social relationships" (York and Mancus 2009:127n). I agree with Nelson (2011:116) that it is unfortunate that two Frankfurt School scholars in the environmental humanities and social sciences have a very strong constructionist bent (Vogel 1996; Biro 2005) uncharacteristic of early critical theory. The chief implications resulting from these two lines of criticism seem to be that the Frankfurt School acted as a harbinger of strong relativist and sometimes anti-scientific stances in postmodernist and poststructuralist circles (York and Mancus 2009:129; cf. York and Clark 2010:477) and, more substantively, that there was a shift from a study of the forces and relations of production to a restrictive study of ideology (York and Mancus 2009:127). (2b) is an unproblematically valid and accurate criticism. Without sharpening their analysis through the ecological sciences available to them, the biophysical world—simply denoted by the word "nature"—often appears as an amorphous thing "out there" that society and individuals interact with, think about, and dominate. Although the Frankfurt School provided more specific examples of "external nature" in the form of animals, soils, the countryside, forests, natural resources, etc., one will not find talk of natural cycling, ecosystem feedback loops, or other ecological insights. While this is an important limitation of their work for environmental sociology, correcting this weakness would be logically consistent with the larger framework of critical theory as, I show, (2a) is problematic (i.e. it would not breach or contradict any of their metatheoretical assumptions) and, independently, does not constitute a cause to exclude critical theory from environmental sociology's advancement (this limitation is addressed further in the conclusion). The most difficult critique to respond to is (1), as I am uncertain of its purpose. I

assume this is implicitly contrasted with empirical study, meaning something similar to: critical theory only speculated about societal-environmental interactions rather than systematically studied these interactions in the field. The Frankfurt School undoubtedly theorized with considerable abstraction, but this too does not seem to exclude their relevance for environmental sociology and may even better accommodate theoretical extension and application.

My goal is not to produce a polemical treatise over scholastic-like niceties. I commend York, Foster, Clark, and Mancus for providing some of the only serious discussions of early critical theory in environmental sociological literature and opening up space for further discussion. My goal is to arrive at a more affirmative reexamination in light of their concerns. Along with responding to critiques of the Frankfurt School made by environmental sociologists, the overarching research goal of this project is to demonstrate how critical theory can conceptually inform sociological examinations of societal-environmental relations and address contemporary debates, topics, and issues in environmental sociological theory and sociological animal studies. More fundamentally, the aim is to familiarize, or perhaps re-familiarize, sociologists studying human-nature relations with a group of theorists surprisingly and unfortunately absent from their inquiry. Revisiting the works of the Frankfurt School can contribute to the advancement of environmental sociology and animal studies with novel ideas, hypotheses, and conceptualizations. Below, I show that Adorno, Horkheimer, Marcuse, and Fromm tackled, sometimes over a half-century ago, many debates and topics in environmental sociology taking place today. Pulling old ideas to the surface often opens new doors for exploration. Or, sometimes "staying behind coincides with being ahead" (Žižek 1997:4). They addressed the role of rationality, science, and technology in human-nature relations; the commodification of the environment and environmentalism; epistemological issues that can

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inform the constructionism/realism debate; the interrelationships between the domination of animals and humans; and how society can bring itself into a sustainable and ethical relationship with the environment—a normative goal often described as *reconciliation* by Horkheimer and Adorno (a term later used by Bookchin [1982a:11]), the *liberation of nature* by Marcuse, and *peace* by Fromm. Most importantly, the Frankfurt theorists firmly fastened the domination of the environment by instrumental reason, unreflective technical progress, and the spread of capitalism to the psychical and physical domination of humans—a thesis that predated other well-known works by decades (e.g. Leiss 1972; Merchant 1989:164ff). Their "domination thesis" organized many of their theories, assumptions, assertions, and normative goals, and, as shown below, was consistently and systematically discussed in almost all of their major works.

METHODOLOGY

My dissertation is a theoretical project, though the term "theory" in sociology has a number of meanings and dimensions. Abend (2008) created an illuminating semantic typology to help clarify the term when used in discipline. In this typology, my dissertation is "theoretical" in at least three of the seven common meanings of the word when used by sociologists. First and foremost, it is a theoretical project in the sense that it is an analysis and interpretation of the writings of past social theorists ("What did Weber really mean?", etc.); a systematic analysis that often takes place in order to assess the relevancy or usefulness of the theory (Abend's "theory$_4$"). The assessment and application of the Frankfurt School for the advancement of environmental sociology and animal studies are the overriding purposes of my dissertation. Second, it is a theoretical project in that it is motivated by an underlying normative vision (Abend's "theory$_6$"; e.g. feminist theory, postcolonial theory, critical theory, etc.). That is, the motivation for

developing a critical environmental sociological theory is to hopefully develop new options for building a healthier relationship between society and nature. To use a clichéd though still imperative dictum: I hope to participate in theory building and speculation in order to encourage thoughtful practice. Third, it is a theoretical project because it addresses the "special philosophical problems" of sociology (Abend's "theory$_7$"). Part of my dissertation reassesses metatheoretical issues in environmental sociology through a critical theoretical lens.

Although my dissertation is a theoretical project, it is helpful to explain the basic method used to gather the appropriate "data" for this project (for the "theory$_4$" component). Because the dissertation is, in many ways, a historical research project, I borrow from historical methods to systematize the collection of textual content.[6] Busha and Harter (1980:91) have summarized the procedural steps of the historical method as follows:

(a) the recognition of a historical problem or the identification of a need for certain historical knowledge [in this case, knowledge of historical writings about human-nature relations];

(b) the gathering of as much pertinent information about the problem or topic as possible;

(c) if appropriate, the forming of hypotheses that tentatively explain relationships between historical factors (variables);

(d) the rigorous collection and organization of evidence …;

(e) the selection, organization, and analysis of the most pertinent collected evidence, and the drawing of conclusions; and

(f) the recording of conclusions in a meaningful narrative.

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[6] I would like to thank Prof. Linda Kalof for bringing this novel approach to my attention. Paying close attention to the influence historical processes have on present social conditions has been an important component of the discipline since its inception (Lachmann 2013). Correspondingly, the history, assessment, and application of theories of society have been important to the discipline since its early stages as well (e.g. Tönnies lifelong fascination with Hobbes, Durkheim's sociological assessment of Montesquieu, Simmel's reading of Nietzsche as a social theorist, and Marx's revisions of Hegel's social thought).

I systematically read the entire corpus of Horkheimer, Adorno, Marcuse, and Fromm (step b). However, because I do not know German my project was limited to their works either translated from the original German into English or those originally written in English.[7] During the readings I took hand-written notes when the authors discuss or mention nature, human-nature relations, animals, human-animal relations, and other directly relevant topics (step d). I then transferred these notes to a word processor to use later when writing the essays (steps e and f). These results, in concert with personal reflection and application to current issues in environmental social theory and animal studies, are presented below.

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[7] It should be noted that the majority of Marcuse's and Fromm's major works were written in English (see Conclusion).

CHAPTER 1

Proto-Environmental Sociology in the First-Generation Frankfurt School

HUMAN REASON(S) AND THE DOMINATION THESIS

A central and consistent thesis of critical theory, now neglected in sociology, declared that

humanity's attempt to dominate (control, master) external, nonhuman nature is intimately and

necessarily linked to the domination of other humans and internal human nature (hereafter

referred to as the "domination thesis" for convenience).[8] The domination thesis is central to, if

not the most important articulation of, critical theory's fundamental assertion: humanity's

intellectual and material progress, development of rationality, and creation of liberal

individualism simultaneously causes societal and individual regression, the spread of unreason

(myth), and individual subjugation. As Adorno ([1964, 1965] 2006:16) put it,

> [t]he growth of rationality is something like the growing ability of the human
>
> species to preserve itself or, as we may also say, the growth in the universal
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> principle of the human self. And the progress of this rationality in its unreflective
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> form is at bottom nothing other than the exploitation of nature transferred to men
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> and continuing to work in them.

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[8] The very concept of "domination" is certainly an elusive one that has been written about extensively elsewhere (e.g. Leis 1972; Kontos 1975). Kellner (1984:165ff; 427-28) has shown that the concept of domination was used by the Frankfurt School, especially in Marcuse, to signify both overt, often forceful oppression (i.e. external control) as well as—specifically for humans—the internalization of suppressive values and prohibitions (i.e. internal control). Kontos' (1979:38f) notion of domination as the *inability to fulfill ontological capacities* due to control reflects the Frankfurt School's use and its applications for both humans *and* nature. However, I agree with Kellner (1984:428) that critical theory's use of the term includes overt oppression and exploitation, whereas Kontos depiction of domination as an outcome of deception and obliviousness is too narrow.

Before explaining the logic behind the domination thesis, it is helpful to illuminate its social

theoretical origins that were derived from the Frankfurt School's unique revision and synthesis

of three distinct theoretical traditions: Freudian, Weberian, and Marxian.[9]

Freud's sociology (i.e. *Civilization and Its Discontents*) and psychology were central

influences in formulating the domination thesis. Psychologically, "internal" nature is explicitly

referred to as "the id" by Adorno ([1961] 1992:106) and more broadly as "the passions" by

Horkheimer (1947:107). Clearly, Marcuse (1955) shared a similar interpretation of human

nature as Freud, though, like Horkheimer's and Adorno's, one revised by Marxist theory.[10]

Sociologically, Freud ([1930] 1961) claimed that the formation and reproduction of civilization

depends on the mastery and control of individual drives (specifically sexual and aggressive

drives) and is maintained and developed by the sublimation of repressed desires. Marcuse's

articulation of the domination thesis was the most explicitly Freudian in nature, even accepting

late Freud's ([1920] 1959) controversial theory of a death instinct (Marcuse 1955:47). However,

Freud ([1930] 1961:68) himself only briefly articulated the interrelation between the mastery of

human desire and the external natural environment.

Weber's typologies of rationality also played a central role in the domination thesis, as

explicitly stated by Horkheimer (1947:24n) and Marcuse ([1964] 1968:205). Specifically,

Weber's ([1921, 1922] 1978:85f) distinction between formal rationality and substantive

rationality (discussed below) (cf. Kalberg 1980:1155-59) (the critical theorists usually referred to

the former as instrumental or subjective rationality/reason). For Weber, modern societies tended

to displace traditional, value-laden, and/or non-empirical understandings of the world and action-

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[9] Scheler ([1926] 1980) was another likely influence in the formation of the Frankfurt School's proto-environmental sociology, especially Horkheimer's. However, Leiss (1972) has already made this connection clear and it does not need to be repeated here.

[10] Their identification of human instincts as nature, likely due to the classical conceptual association with the body and animality, merits a study of its own.

orientations with an impersonal, technical, and calculating type of rationality that locates more efficient means for meeting an administered, abstract, relative end (e.g. profit); a formalized rationality institutionalized in modern bureaucracies and capitalist organizations. When formal rational explanations of the world break down the past's "non-rational" explanations, they also break down human meaning, or they "disenchant" the lifeworld, leading to value fragmentation, meaninglessness, and automaton-like human behavior (Weber 1946). However, unlike the critical theorists, Weber never systematically theorized the links between formal rationality, disenchantment, and societal-environmental interactions. Murphy (1994) has addressed this limitation[11] and formulated a sophisticated environmental sociology that expands Weber's insights. Murphy's brilliant treatment of rationality and nature has numerous similarities with the Frankfurt School's incorporation and expansion of Weberian rationality typologies, though only references the early critical theorists briefly.

The third influence in the development of the domination thesis stems from Marx's social ontology (i.e. historical materialism), concept of ideology, and critique of political economy. The Frankfurt School claimed understandings of nature are derived from praxis. Under capitalism, nature increasingly becomes commodified and, correspondingly, is apprehended (as a reified object) and treated as a commodity. Adorno's (1966) critique of "identity thinking" (discussed below) stems from Marx's critique of exchange value. Further, their analysis of the relation between capitalism and nature visibly stemmed from their foundation in Marxist theory. Additionally, Marx's normative vision for a better society and emphasis on social critique

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[11] Foster and Holleman (2012) have recently contested this claim in an intriguing article, but, as stated above, it is problematic to deem Weber's transitory and dispersed environmental sociological insights as systematic. The significant achievement and implications of Foster and Holleman's piece, in my view, was integrating these insights into a systematic and logical whole.

corrects the limits of Freud's rather ahistorical conception of human nature and Weber's "value-neutral" approach to sociology.

The domination thesis is most systematically and clearly presented in Horkheimer's *Eclipse of Reason* (1947), so I will begin the analysis there. Horkheimer distinguished between two types of reason: objective/substantive reason and subjective/instrumental reason.[12] Objective reason, practically synonymous with Weber's substantive rationality, is characterized by the ability to *judge* actions, goals, thoughts, and objectives as good or bad, beautiful or ugly, true or false in themselves. It conceives of the world as a reasonable, "comprehensive system" where the merit of the actions and thoughts of human beings could only be judged by "its harmony with this totality"—including humanity's interactions with nature (1947:4). The purpose of objective reason was to provide meaning to the world and human action. Not unlike Tönnies and Weber, Horkheimer (1947:3) claimed that modern societies tended to formalize rationality to the point that social action and thought could only be judged in reference to self-interest: "the average man will say that reasonable things are things that are obviously useful, and that every reasonable man is supposed to be able to decide what is useful to him." The formalization of reason has led to a triumphant subjective, formal, or instrumental reason; a type of reason that "proves to be the ability to calculate probabilities and thereby to co-ordinate the right means with a given end" (1947:5). However, the formalization of reason purges moral and aesthetic reflection from rationality, making rational judgment on the rightness of the given end

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[12] To the modern reader, "subjective reason" may appear a strange label, especially when applied to modern science (see below). A passage from Marcuse helpfully distinguishes what Horkheimer had in mind. Comparing technological rationality (Marcuse's account of subjective reason) to Hellenic thinking (an example of objective reason), Marcuse ([1965] 2001) stated, "[technological rationality] is characterized by a new mode of mediation between Subject and Object. All objectivity is definable only in terms of a Subject, for a Subject; this pertains also to pre-technological rationality … [b]ut this pre-technological intellect attains an objective reality which includes norms of existence, while the technological mediation frees objectivity from such norms. The remaining objectivity is not less but more subjective; mathematical equations are the ideational result of mental operations, and whatever 'corresponds' to or is expressed by these equations is mere material for theoretical and practical transformation."

impossible. As Horkheimer ([1941] 1978:31) stated in an earlier essay: "it [the value judgment] is regarded as a matter of subjective preference whether one decides for liberty or obedience, democracy or fascism, enlightenment or authority, mass culture or truth." In modern society, the only human aim considered reasonable is subjective interest in self-preservation "for its own sake" (1947:94). This is not to say that systems of objective reason did not include subjective interest, but, for the former, self-interest was only a partial concern and the purpose was "to reconcile the objective order of the 'reasonable,' … with human existence, including self-interest and self-preservation" (1947:5). In short, objective reason is primarily interested in just and right *ends* that are in harmony with a given totality (capable of answering "why" questions) and instrumental reason is primarily interested in utilizing the most efficient *means* to attain individual self-preservation and, in institutionalized form, the reproduction of unreflective and, at times, unjust systems and subsystems (capable of answering "how" questions) (see sections on science and capitalism).

The proliferation of instrumental reason creates a series of interrelated difficulties that should be of interest for those studying societal-environmental interactions. The meaning once provided by forms of objective reason is lost in the formalization of reason (disenchantment). Formalized reason is incapable of judging or valuing any end, object, or action to be good or bad, beautiful or ugly in itself, but only in reference to its usefulness for self-preservation. For a seemingly inconsequential example:

> [l]ess and less is anything done for its own sake. A hike that takes a man out of
> the city to the banks of a river or a mountain top would be irrational and idiotic,
> judged by utilitarian standards; he is devoting himself to silly or destructive
> pastime. In the view of formalized reason, an activity is reasonable only if it

serves another purpose, e.g. health or relaxation … [T]he activity is merely a tool,

for it derives its meaning only through its connection with other ends. … No walk

through the landscape is necessary any longer; and thus the very concept of

landscape as experienced by a pedestrian becomes meaningless and arbitrary

(Horkheimer 1947:37-38).

In other words, "nature has been stripped of all intrinsic value or meaning. … [and] man has

been stripped of all aims except self-preservation" (Horkheimer 1947:101). Seeking to control,

master, and dominate nature is now considered the only reasonable way to interact with nature.

That is, nature is a means—matter devoid of intrinsic value—for attaining an arbitrary and

unreflectively formulated end. Stated negatively, subjective reason cannot conceive nature as an

end in itself where human action can be deemed rational in relation to a totality: "nature is today

more than ever conceived as a mere tool of man. It is the object of total exploitation that has no

aim set by reason, and therefore no limit. Man's boundless imperialism is never satisfied"

(1947:108). In short, in its formalization, reason is incapable of setting limits or reflecting upon

the goodness of ends.

  The proliferation of instrumental reason not only makes the domination of nature more

efficient, but also leads to the domination of human beings. Without substantive ends

(happiness, justice, freedom, etc.), humanity's attempts to master and control nature—a goal

originally intended to free humanity from nature's supremacy—have paradoxically enslaved

humans along with the rest of nature:

[t]he human being, in the process of his emancipation, shares the fate of the rest

of his world. Domination of nature involves domination of man. Each subject

not only has to take part in the subjugation of external nature, human and

nonhuman, but in order to do so must subjugate nature in himself (Horkheimer

1947:93; cf. Adorno [1955] 1967:67).

In short, *the domination of nature is intimately tied up in the domination of the self and other human beings*. Although the domination of nature is perfected under capitalism (see section "Capitalism and Nature" for expansion), the Frankfurt School felt that tendencies in other historical periods preceded its destructiveness:

> [m]odern insensitivity to nature is indeed only a variation of the pragmatic
>
> attitude that is typical of Western civilization as a whole. The forms are different.
>
> The early trapper saw in the prairies and mountains only the prospects of good
>
> hunting; the modern businessman sees in the landscape an opportunity for the
>
> display of cigarette posters (Horkheimer 1947:104).

Horkheimer and Adorno famously traced the germinal forms of the domination of nature to the dawn of western civilization in the *Dialectic of Enlightenment* ([1944] 1969).

It should be made clear that the reason for writing the *Dialectic* was explicitly stated to be a *defense* of reason (Horkheimer and Adorno [1944] 1969:xvi)—not to create a romantic treatise *against* science and rational thought in the name of nature, as some critics frame it, including their student (Habermas [1985] 1987:106ff). Far from rejecting rationality, the Frankfurt School did their best to protect it from demise in the wake of authoritarian state socialism, National Socialism, and monopoly capitalism. In becoming the only accepted rationality under capitalism, instrumental reason becomes unreason. In its attempt to increase "all apparatuses and means of quantifiable domination," reason abandons the Enlightenment's promise: "the rational organization of mankind" (Adorno [1963, 1969] 1998:138). Notwithstanding, the Frankfurt School took the criticisms of rationality from neo-romanticism and *Lebensphilosophie* seriously

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(e.g. Horkheimer [1937] 1972a), though critically (e.g. Horkheimer [1934] 1993) (see Slater 1977:48-50), and submitted the contradictions inherent in the unfolding and prevalence of instrumental reason to ruthless criticism—contradictions that have still not been relieved, intellectually or materially. Like Horkheimer in the *Eclipse of Reason*, Horkheimer and Adorno, saw two, contradictory forms of rationality permeating Western consciousness, which they thought were embodied in Kantian philosophy:

> [a]s the transcendental, supraindividual self, reason comprises the idea of a free, human social life in which men organize themselves as the universal subject and overcome the conflict between pure and empirical reason in the conscious solidarity of the whole [objective/substantive reason]. … At the same time, however, reason constitutes the court of judgment of calculation, which adjusts the world for the ends of self-preservation and recognizes no function other than the preparation of the object from mere sensory material in order to make it the material of subjugation [subjective/instrumental reason] (Horkheimer and Adorno [1944] 1969:83-84).

For Horkheimer and Adorno, the origins of both substantive and instrumental reason originated in human's earliest interactions with nature in "primitive" societies (Horkheimer 1947:176; Horkheimer and Adorno [1944] 1969:15),[13] but instrumental reason took true form in Greek society, which they saw symbolized in Homer's *Odyssey*. Homer's epic of personal sacrifice represented a "prototype" of the bourgeois individual: one who dominates inner nature (realization of pleasures, instincts) to dominate external nonhuman and human nature:

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[13] It is important to note that the critical theorists did not view the domination of nature as something "natural" (e.g. Horkheimer 1947:108). They continually called for the end of domination (see section on reconciliation).

[i]n class history, the enmity of the self to sacrifice implied a sacrifice of the self,

inasmuch as it was paid for by a denial of nature in man for the sake of

domination over non-human nature and over other men. This very denial, the

nucleus of all civilizing rationality, is the germ cell of a proliferating mythic

irrationality: with the denial of nature in man not merely the *telos* of the outward

control of nature but the *telos* of man's own life is distorted and befogged

(Horkheimer and Adorno [1944] 1969:54).

In short, Odysseus is a symbolic, early representative of capitalist ideology ([1944] 1969:54-55)

because he "masters nature by rational calculation" at the expense of his own immediate passions

(Held 1980:402ff). In addition to Greek mythology, the Frankfurt theorists claimed that Judeo-

Christian theology also contained the seeds to an instrumental attitude toward nature

(Horkheimer 1947:63; Horkheimer and Adorno [1944] 1969:104ff). Although the instrumental

domination of nature in earlier Western societies was "typical of Western civilization as a

whole" (Horkheimer 1947:104; cf. Horkheimer and Adorno [1944] 1969:31-32), the efficiency

and prevalence of this domination paled in comparison to the instrumental calculation and

control of nature by science and technology embedded in capitalism.

SCIENCE, TECHNOLOGY, AND NATURE

"The industrial society which makes technology and science its own is organized for the ever-

more-effective domination of man and nature, for the ever-more-effective utilization of its

resources."

Herbert Marcuse, *One-Dimensional Man* (1964:17)

23

Environmental sociological inquiry is divided between those who claim science and technology will fundamentally improve society's relationship with the biophysical environment and those who argue science and technology are foundational to the ecological destructiveness characteristic of modern societies (for review, see Yearly 1997). For ecological modernization theory (EMT), technology and science, within capitalist social formations, are the principle *means for* securing sustainability (e.g. Mol 1995; 1997; Mol and Sonnenfeld 2000). In opposition, many argue science and technology are principle *culprits of* unsustainability (Yearley 1997:227) or, in postmodernist and poststructuralist circles, reject the possibility of identifying "real" environmental problems through science (for review, see York and Clark 2010:488ff).[14] Here I show that the early critical theorists surpassed this debate decades ago, arguing science and technology in capitalist societies—as embedded social projects—are largely used to dominate the external natural world. However, they maintained that science is not an *inherently* exploitative institution and argued for the development of a "new" science and technology (cf. the section on reconciliation).

Before discussing science and technology's relation to nature in critical theory, it should be made clear that the Frankfurt theorists never rejected scientific inquiry. From the early formulation of critical theory, Horkheimer ([1931] 1993) called for a practical, interdisciplinary materialism that sought to link social science and philosophy, Adorno led a massive empirical study concerning the latent fascistic tendencies in America (Adorno et al. [1950] 1969), Horkheimer ([1937] 1972b:229) explicitly stated that statistics were important for critical theory, and that it was "inadmissible to run counter to the tested results of science" (Horkheimer [1937] 1972a:183; cf. Adorno [1969] 1976:79; [1964, 1965] 2006:21, 25). Their critique of science,

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[14] Although I disagree with the brief treatment of Horkheimer and Adorno in this piece, it is an excellent review and York and Clark's (2010) proposed remedy to this debate is strikingly similar to the Frankfurt School's.

specifically positivism and "scientism" (science as ideology), was specific, nuanced, and defendable, in my estimation. The Frankfurt School's critique of science was best articulated by Horkheimer, and can be summarized as follows: (1) science itself has forgotten *why* the Enlightenment put faith in science (i.e. "concern for a better society") (Horkheimer [1932] 1972:5); (2) relatedly, science no longer sets meaningful tasks or ends and is largely unreflectively concerned with the "mindless accumulation of data" (Horkheimer [1936] 1972:92; cf. [1937] 1972a:145; [1932] 1972:8); (3) if science is going to benefit humankind it cannot be value-free, meaning, if the scientific project disavows all values (excluding the value of value-neutrality) they cannot offer society anything meaningful or critical and may unreflectively further the power of elites (Horkheimer [1937] 1972a:165, 178; [1937] 1972b:242; [1935] 1993:158; cf. Marcuse [1966] 2011); (4) natural scientific methodology is not the only valid way to comprehend reality (Horkheimer [1937] 1972a:183; [1937] 1972b) and, more specifically, is not always appropriate for social scientific inquiry, especially in the construction of normative theories (Horkheimer [1937] 1972b; cf. Adorno [1969] 1976; Marcuse [1941] 1960:323ff; 1964:105ff); (5) knowledge is historically and socially contingent and even the "brute facts" must be placed in historical context and not elevated to immutable laws, especially in the social sciences (Horkheimer [1937] 1972a:157; [1933] 1972:42; Adorno [1964, 1965] 2006:20ff);[15] and, most importantly for this section (though intimately related to the other points); (6) science and technology are currently embedded in a profit-maximizing system and are regularly utilized to dominate external and internal nature (e.g. Horkheimer [1930] 1993:316).

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[15] This assertion does not necessarily lead to relativism (see below). Further, it is not foreign to Marx's claims. For example, political economy "expresses in general, abstract formulas the *material* process through which private property actually passes, and these formulas it then takes for *laws*. It does not *comprehend* these laws, i.e., it does not demonstrate how they arise from the very nature of private property" (Marx [1844] 1964:106; cf. [1858] 1973:687; [1867] 1976:771; [1894] 1981, ch. 48).

Following the Frankfurt School, properly theorizing science's role in societal-environmental interactions presupposes that conceiving of science as a nebulous, metaphysical method or branch of epistemology disconnected from material reality is rejected outright; science "can be understood only in relation to the society for which it functions" (Horkheimer 1947:59; cf. Marx [1858] 1973:704). Or, "there are not two worlds: the world of science and the world of politics … there is only one world in which science and politics and ethics, theory and practice are inherently linked" (Marcuse [1966] 2011). It is a social activity embedded in material conditions, human interests, and social relations. One must not forget that one of the explicit goals—if not the guiding principle—in developing the scientific method during the Renaissance through the Enlightenment was to demystify the "artificial darkness" metaphysics had placed on nature in order to master it for human aims (e.g. Cassirer 1951:37ff; Leiss 1972).[16] This is a fact that is still acknowledged both by both defenders and critics of the project of modernity:

> [t]he foundation of modern natural science was established during the
> Renaissance. The aim of this science is to identify, with the support of
> systematically employed empirical knowledge, regularities in nature's course, by
> means of which one can then either effect or hinder certain effects as are
> required—in other words, to dominate nature to the greatest extent possible
> (Horkheimer [1930] 1993:314-15).

Horkheimer, Adorno, and Marcuse all tied the development of modern science as a necessary component of economic development. In reference to Descartes' ([1637] 1960) early formulations of the scientific method, Horkheimer ([1930] 1993:376) claimed that:

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[16] Nietzsche ([1906] 1967:328) accurately summarized this in one of his notebooks, defining science as: "the transformation of nature into concepts for the purpose of mastering nature—[science] belongs under the rubric 'means.'"

[t]he needs of the trade economy that was then in the process of unfolding, the

necessity of technical mastery over inanimate nature, led to the idealization of

mathematics as the only reliable form of knowledge (cf. [1937] 1972b).

Like Descartes' philosophy of science, Bacon's ([1620] 1960) philosophy had an inherently

instrumental view of nature (Horkheimer and Adorno [1944] 1969:3f). The development of

reason in early elaborations of science had one overarching result: "[w]hat men want to learn

from nature is how to use it in order wholly to dominate it and other men. That is the only aim"

(Horkheimer and Adorno [1944] 1969:4). Marcuse (1964:146-47) claimed that it was precisely

the growing ability to comprehend natural laws in order to manipulate them that purged ethics

from science. That is, the expulsion of rational ends from reality was a necessary factor in

treating nature in exclusively utilitarian ways; in short, for shedding value from fact.

Horkheimer and Adorno ([1944] 1969:84) provided an analogy to display this point: "[s]cience

in general relates to nature and man only as the insurance company in particular relates to life

and death. Whoever dies is unimportant: it is a question of ratio between accidents and the

company's liabilities." The result of value-free scientific progress for animals was most clearly

manifested in behaviorism's experiments in "their nauseating physiological laboratories" that

dominated psychology in the midcentury (Horkheimer and Adorno [1944] 1969:245) (see

Chapter 2). Like the unreflective deductions of vivisectionists, the Frankfurt theorists, echoing

their domination thesis, claimed that this instrumental view and treatment of nonhuman nature

"is reproduced within humanity" (Horkheimer and Adorno [1944] 1969:110; cf. Horkheimer

[1930] 1993). The characteristically modern view of nature as mechanistic (Horkheimer [1933]

1972:35) was taken up by Machiavelli and Hobbes to understand human nature in order to

manipulate it. By viewing the processes of nature as ahistorical, law-like, and uniform they

attempted to develop their own doctrines of nature of human beings as "eternally fixed" (e.g. Machiavelli [1531] 1950:105, 113-14, 149, 216, 530; Hobbes [1651] 1968:85ff). Post-medieval theorists of human nature hoped and needed, like their natural scientist counterparts, to understand nature to better control and manipulate it. Like Descartes' and Bacon's conception of nonhuman nature, Machiavelli's earlier science of man and politics was an ideological necessity for the early developments of capitalism; a science for a strong central government to destroy feudal trade barriers (Horkheimer [1930] 1993). In short, science, under the imperatives of capital, exists largely for the domination of nonhuman *and* human nature.

The use of applied science (technology) to dominate nature was perhaps more systematically and coherently theorized by Marcuse as his social theory was, in many ways, organized to comprehend how technology and its applications were utilized to dominate humans and nature in advanced capitalist societies, from his earlier ([1941] 1978) to later (1972) writings. Similar to his former mentor's mature statements (Heidegger [1953] 1977; [1964] 1977), Marcuse ([1960] 1989) claimed that late capitalism supplanted ontology with technology and the natural world with a "technical world," or, "technological totality." For Marcuse (1964), an institutionalized and totalizing technical efficiency devoid of substantive ends created a "one-dimensional" (substanceless, uncritical) individual and society, negating ideas and activities that could incite radical change. Marcuse emphasized that technology is not an independent, autonomous force, but is organized in late capitalism as a medium for domination:

the domination of man by man is still the historical continuum that links pre-
technological and technological Reason. However, the society which projects and
undertakes the technological transformation of nature alters the base of

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domination by gradually replacing personal dependence … with dependence on

the "objective order of things" (Marcuse 1964:144, cf. 3).

For Marcuse ([1960] 1989), the complete transformation of nature through technical mastery—

again, without end goals—created a "technological rationality" that distilled a "pure"

instrumentality (cf. 1964:158). Embedded in a society of organized domination, technology is

regularly utilized for the domination of humans and the rest of nature:

[n]ot only the application of technology but technology itself is domination (of

nature and men)—methodical, scientific, calculated, calculating control. Specific

purposes and interests of domination … enter the very construction of the

technical apparatus. Technology is always a historical-social project: in it is

projected what a society and its ruling interests intend to do with men and things

(Marcuse [1964] 1968:223-24; cf. Adorno [1968] 2000:135).

That is, technology and its applications, when organized by the interests of capital, will likely be

used to further the control and domination of nature. From Marcuse's assumptions, theories

which claim technological innovation *within a capitalist social formation* will fundamentally

improve society's relationship with nature (i.e., the technical fix) are an outgrowth of

technological rationality; a "greener" version of which is logically contradictory from a critical

theoretical perspective. Although Marcuse's formulation of technological rationality was

primarily concerned with theorizing how late capitalism abolishes avenues for qualitative

change, the creation of technological reason is rooted in society's domination of nature—another

essential component of critical theory derived from examining relations between society and

nature. Once again repeating critical theory's domination thesis, Marcuse (1964:158) claimed

that the progress of technological rationality increased the ability to more effectively dominate

humans "*through* the domination of nature" (Marcuse 1964:158). The ongoing mastery of nature

for technological innovation in order to dominate human beings was put famously by Adorno

(1966:320): "[n]o universal history leads from savagery to humanitarianism, but there is one that

leads from the slingshot to the megaton bomb."

Critical theory's insights into science and technology's role in societal-environmental

interactions transcend the debate of "whether science benefits the environment or whether it is

injurious to it" (Yearly 1997:227). Science and technology in capitalist societies are largely

destructive toward nature due to the demands of capital and the lack of substantive ends—but it

need not be so (Horkheimer and Adorno [1956] 1972:95). They claimed science and technology

free from their role in the organized domination of nonhuman and human nature could aid

society in building a harmonious relationship with nature (discussed in the section on

reconciliation). Progress in science, technical mastery, and the forces of production were never

scorned by critical theory in a romanticism-induced technophobia or proto-postmodern rejection

of science. Instead, the Frankfurt School claimed that regression was caught up in the very

process of this progress *because* technical, material, cultural, and intellectual progress "runs in a

single strand, on the rails of the mere domination of nature" (Adorno [1963, 1969] 1998:212).

For the Frankfurt School, this was one component, if not the most important component, of the

dialectic of enlightenment: that mankind, "instead of entering into a truly human condition, is

sinking into a new kind of barbarism" (Horkheimer and Adorno [1944] 1969:xi). The mastery

and control of nature was meant to free human beings from the supremacy of nature, but in the

process this "control of nature as control of men far exceeds in horror anything men ever had to

fear from nature" (Adorno [1951] 1974:239; cf. 1966:67, 361; Horkheimer 1947:109ff; Marcuse

[1960] 1989)—a proposition most clearly manifested by the basic processes of capitalism.

CAPITALISM AND NATURE

> "Feeling nature, especially feeling nature's silence, has become a rare and yet commercially
>
> exploitable privilege."
>
> Theodor W. Adorno, *Aesthetic Theory* ([1970] 1984:102)

As suggested above, the domination thesis is not merely an ideational or psychological thesis.

That is, the Frankfurt School did not argue that humanity's instrumental perception and treatment

of nature could be theorized independently from a material "base," but argued, instead, that

instrumental reason originated in conscious human interactions with nature (praxis) and its

proliferation is conditioned and organized by the structures of society: "[t]he complete

transformation of the world into a world of means rather than of ends is itself the consequence of

the historical development of the methods of production" (Horkheimer 1947:102; cf. Horkheimer

1947:21, 106, 108-9; Horkheimer and Adorno [1944] 1969:14, 54f; Marcuse 1972:59f).[17] The

ideational component of the domination thesis has foundations in Marx as well. A similar

account of humanity's perception and utilization of nature was offered by Marx in the

Grundrisse. "For the first time," under commodity production:

> nature becomes purely an object for humankind, purely a matter of utility; ceases
>
> to be recognized as a power for itself; and the theoretical discovery of its
>
> autonomous laws appears merely as a ruse so as to subjugate it under human
>
> needs, whether as an object of consumption or as a means of production (Marx
>
> 1973:410).

However, like Marx, the critical theorists understood that examining ideas and values was not

enough to theorize humanity's relationship with nature. The domination thesis implied the very

real, material domination of nature. More specifically, it was not until capitalism that "[t]he

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[17] This assertion alone constitutes an unbridgeable disparity between critical theory and poststructuralism.

domination of nature became an interest of the whole economic system" (Held 1980:154). As

Adorno (1966:306) put it, "[t]he unleashing of productive forces, an act of the spirit that controls

nature, has an affinity to the violent domination of nature." Further, in capitalist societies, the

ideational and material components are interdependent: "nature appears as that which capitalism

has made of nature: matter, raw material for the expanding and exploiting administration of men

and things" (Marcuse 1972:62).

Similar to the science and technology debates in environmental sociology, EMT purports

that capitalist development is not inherently unsustainable. Preferring the phrase "current

institutional structure" over "capitalism," Mol (2001:58) epitomized this perspective:

"environmental deterioration is conceived of as a challenge for socio-technical and economic

reform, rather than the inevitable consequence of the current institutional structure." Some EMT

scholars go so far as to argue that market dynamics and expansion are fundamental solutions to

global environmental degradation (e.g. Jänicke and Jacob 2004). Marxist environmental

sociologists have sharply disagreed, typified by O'Connor's (1998:235) answer to the question,

"'Is an ecologically sustainable capitalism possible?'", replying, "'Not unless and until capital

changes its face in ways that would make it unrecognizable to bankers, money managers, venture

capitalists, and CEOs looking at themselves in the mirror today'" (for empirical support and

reviews, see York, Rosa, and Dietz 2010; Dietz, Rosa, and York 2010; Rosa and Dietz 2012).

Writing before celebrated environmental sociological treatises concerning capitalism's

unsustainable relationship with nature (e.g. Schnaiberg 1980; Foster 1994; O'Connor 1998),

Marcuse (1994:52, 53) placed himself firmly on the side of Marxist environmental sociologists,

arguing that "monopoly capitalism is waging a war against nature" and that the basic laws of

capitalism contradict attempts to fundamentally improve society's relationship with nature,

including, "the law of increased accumulation of capital, of the creation of sufficient surplus value, of profit, of the necessity of perpetuating alienated labor and exploitation." For Marcuse, the same principles that organize capital are inherently antagonistic toward the environment:

> [t]he pollution of air and water, the noise, the encroachment of industry and commerce on open natural space have the physical weight of enslavement, imprisonment. … [I]t is obvious to what extent the violation of nature is inseparable from the economy of capitalism (Marcuse 1972:61).

The imperatives of capitalism are necessarily at odds with nature's prosperity. Because the "structure of capitalist productivity is inherently expansionistic," it cannot cease encroaching further into natural spaces (Marcuse 1994:52). Even nature's image as a non-repressive state, which Marcuse (1994:52) considered "the very negation of market society" (cf. Horkheimer and Adorno [1944] 1969:254-55; Adorno [1970] 1984:108f),[18] could not avoid capitalism's grip due to its incorporation into the culture industry (i.e. the manufactured administration of "culture" in commodified form):

> [t]he story of the boy who looked up at the sky and asked, 'Daddy, what is the moon supposed to advertise?' is an allegory of what has happened to the relation between man and nature in the era of formalized reason (Horkheimer 1947:101).

For Horkheimer and Adorno ([1944] 1969:149), nature is immediately "denatured" the moment it is externally packaged and marketed as something "natural." The culture industry makes nature itself as meaningless as any commodity. As Adorno put it in *Aesthetic Theory* ([1970] 1984:101):

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[18] "The image of nature survives because its complete negation by artefacts would necessarily involve closing one's eyes to the possibility of a sphere beyond bourgeois work and commodity relations. In spite of its social mediatedness, the beautiful in nature remains an allegory of that beyond" (Adorno [1970] 1984:102).

[i]ntegrated in the commercial world (as 'tourist industry', for example) and

devoid of its critical sting, the immediate appreciation of nature has become

neutralized. As nature becomes synonymous with national parks and wildlife

preserves, its beauty is purely tokenistic. Natural beauty is an ideological notion

because it offers mediatedness in the guise of immediacy (cf. [1970] 1984:311;

for a similar account of zoological gardens, see [1951] 1974:114-15).

Relatedly, Horkheimer noted ([1957] 1974:21) that monopoly capital not only obliterated the

small farmer, but the quiet valleys of the country were diminishing with them, making

landscapes something to be "appreciated only by connoisseurs." Again reiterating the

domination thesis, Marcuse argued that capitalism's domination was of both human nature and

external nature. Alienated labor and social domination repress and distort human instinctual

drives, increasing the manifestation of aggressiveness and destructiveness in society (Marcuse

1955). Indeed, the very destruction of external nature was detrimental to human nature and

existence, materially and "existentially":

[c]ommercialized nature, polluted nature, militarized nature cut down the life

environment of man, not only in an ecological but also in a very existential sense.

… [I]t deprives man from finding himself in nature … [and] also prevents him

from recognizing nature as a *subject* in its own right—a subject with which to live

in a common human universe (Marcuse 1972:60; cf. 1964:73).

In short, the Frankfurt School claimed capitalism is inherently destructive toward nature—

ecologically, aesthetically, and internally.

Following the assertion that nature is the antithesis of capitalism, Marcuse (1969:28;

1972:17, 61; 1994:53) claimed that fighting for the preservation and decommercialization of

nature was simultaneously a fight against capitalism. Marcuse spoke favorably of the

environmental movement very early in its formation.[19] However, he claimed that, like the

environment itself, the environmental movement too was increasingly becoming a marketable

commodity. Indeed, already in 1972 he felt that the movement had been "by and large been co-

opted" in the United States (Marcuse [1972] 1994:51). For all of the inherent antagonisms

between the basic processes capitalism and the goals of environmentalism, Marcuse (1972:61)

felt that "the political function of ecology is easily 'neutralized';" specifically through green

marketing and reformism (Marcuse [1972] 1994:53). However, Marcuse clearly supported the

movement and encouraged a fight for the environment within capitalist societies:

> [s]till, the physical pollution practiced by the system must be combated here and
>
> now. ... To drive ecology to the point where it is no longer containable within the
>
> capitalist framework means first extending the drive *within* the capitalist
>
> framework (Marcuse 1972:61; cf. [1972] 1994:53).

That is, for a "revolutionary ecological liberation" (Marcuse [1972] 1994:51) it is necessary for

the environmental movement to radicalize their demands within capitalism in order to break out

of the restraints of capitalism.

FIRST NATURE AS SECOND NATURE: THEORIZING REIFIED NATURE

 "The more reified the world becomes, the thicker the veil cast upon nature, the more the thinking

weaving that veil in its turn claims ideologically to be nature, primordial experience."

Theodor W. Adorno, *Critical Models* ([1963, 1969] 1998:7)

In 1994, Dunlap and Catton raised concerns regarding an increasing tendency in environmental

sociology to utilize social constructionist theoretical frameworks for investigating societal-

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[19] Marcuse usually called what we now broadly term environmentalism, "ecology."

environmental interactions. Specifically, they worried that constructionist-rooted comments

made by Buttel and other scholars (Buttel et al. 1990; Buttel and Taylor 1992; Taylor and Buttel

1992) would restrain objective investigations of the social causes of environmental problems,

induce unhealthy skepticism and "extreme relativism," and ultimately restrict environmental

sociology and constituted a form of human exemptionalism (Dunlap and Catton 1994:20f; for a

more integrative and sympathetic neo-realist reply to constructivist claims, including Buttel and

Taylor's [1992], see Rosa and Dietz 1998). The resulting debate is often framed as one between

constructionism and realism (as if these were mutually exclusive perspectives). Social

constructionists claim constructionism can aid the study of societal-environmental interactions

while realists replicate Dunlap and Catton's initial fears (for competent overviews, see Dickens

1996:71ff from a realist-oriented perspective and Burningham and Cooper 1999 from a

constructionist-oriented perspective). Horkheimer ([1930] 1993:334-35) concisely summarized

how the Frankfurt School can contribute to the constructionism/realism debate in environmental

sociology:

> [w]hat we call nature is dependent upon human beings in a twofold sense: first,
>
> humanity's process of development continuously transforms nature through the
>
> course of civilization; second the very conceptual elements through which we
>
> give content to the word 'nature' depend upon the epoch in which humanity finds
>
> itself. In other words, the object of the knowledge of nature, like this knowledge
>
> itself, is conditioned. … What nature is depends just as much on the life process
>
> of human beings, as, conversely, this life process depends on nature.

Here Horkheimer claimed that nature is indeed, "socially constructed," both materially ("through

the course of civilization") and epistemologically (through "conceptual elements"). The mere

existence of an intersubjectively shared analytical distinction between society and nature

cements the latter claim: "[i]n every perception of nature there is actually present the whole of

society. The latter not only provides the patterns of perception in general, but also defines nature

a priori in relation to itself" (Adorno [1970] 1984:101). That is, to even experience natural

objects, "their very naturalness is determined by contrast with the social world and, to that

extent, depends upon the latter" (Horkheimer [1937] 1972b:201-2). Adorno even claimed that

that aesthetic experience is transformed by society's preformed definition of nature, though

perhaps crudely:

> there is no room for natural beauty in periods when nature has an overpowering
>
> presence for man, as seems to be the case with peasant populations which are
>
> known to be insensitive to the aesthetic qualities of natural scenery because to
>
> them nature is merely an immediate object to be acted upon. The allegedly
>
> ahistorical beauty of nature does have a historical core (Adorno [1970] 1984:96).

Paradoxically, for Adorno, the "appreciation" of natural beauty presupposes our alienation from

it. Delight in natural beauty is firmly fastened to the structural movement of society and, in turn,

dehumanization of its members in mass society. Those who show appreciation for natural

beauty do so "in critical opposition to social trends at a time when the network of social relations

is so tightly woven that the individual rightly fears it may suffocate" ([1970] 1984:96). The

disenchanted and isolated modern individual can find solace in nature: "the lone subject in an

instrumentalized and mutilated world" reach out to nature for its "irregularity and randomness"

([1970] 1984:94, 96)—an opportunity made difficult by the culture industry (discussed above).

It is important to clarify an important ambiguity in the constructionism/realism debate.

Acknowledging that nature is socially mediated does not independently constitute a form of

idealism. The Frankfurt theorists were mindful of the limitations of adopting an idealist

framework for understanding the natural world. One of the chief theses of Adorno's *opus*,

Negative Dialectics (an extensive critique of idealism and defense of materialism) (1966),[20] is

that German idealism's insistence that nature is an extension of human spirit or imperfect

embodiments of Absolute Idea (e.g. Hegel [1830] 2004) is a ruse for the domination of nature.

In idealism, "all that reminds us of nature is inferior, so the unity of the self-preserving thought

may devour it without misgivings" (Adorno 1966:22-23, cf. 179-80, 269-70). For Adorno,

idealism's "identity principle" (the leveling of qualitative difference between concept and object)

is a reflection of contemporary society's "exchange principle." Adorno maintained that idealism

fails to grasp the qualitative differences that exist within nature and that only the materialist

dialectic can grasp nature's "nonidentity" (the uniqueness and autonomy of the given object)

with human thought. Indeed, even Marx and Engels ([1846] 1977:102) acknowledged that

nature is socially constructed: "[l]and has nothing to do with rent of land," but for the landed

proprietor, "land has the significance only of rent of land." Or, "Descartes, in defining animals

as mere machines, saw with the eyes of the period of manufacture. The medieval view, on the

other hand, was that animals were assistants to man" (Marx 1976:512n).[21] The Frankfurt School

never denied the very real existence of "primary" or "first" nature (i.e. the biophysical

environment), but, instead, argued that humans may not have immediate epistemic access to it

due to the structural and, in turn, cultural and ideological alterations in society (Horkheimer and

Adorno [1956] 1972:41). Further, the critical theorists worried that by exclusively viewing

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[20] The implications of this work alone for epistemological issues in studying human-nature relations have been examined in an excellent reading of Adorno by Cook (2006).

[21] Marx's simplistic view of human perceptions of animals during the Middle Ages is problematic (for nuanced overview, see Kalof 2007: ch. 3).

nature through instrumental lenses, we could be missing important components of nature that might be accessed in a different society:

> [O]ur knowledge of nature is really so preformed by the demand that we dominate nature … that we end up understanding only those aspects of nature that we can control. In addition there is also the underlying feeling that while we are putting out our nets and catching more and more things in them, there is a sense in which nature itself seems to keep receding from us; and the more we take possession of nature, the more its real essence becomes alien to us (Adorno [1959] 2001:176).

If nature is mediated by social processes and conceptual categories, how does society conceive of nature in late capitalist societies? In his conception of "first nature" as "second nature," Adorno claimed that the notion of nature has become primarily ideological.[22] Hegel's ([1820] 1967:20f, 108f) conception of second nature signified, in a favorable light, the moral conduct of civil society internalized by individuals and becoming customary, or, second nature. Following Lukács' ([1920] 1971:62f) revision of Hegel, Adorno theorized second nature as the reified world: "whatever is made by human beings, their institutions in the broadest sense, evolve independently of their creators and become second nature" (Adorno [1963, 1969] 1998:155; cf. Marcuse 1969:11).[23] That is, second nature is the result of humanity's forgetfulness of the historically contingent and social origins of the institutions, practices, behaviors, ideas, language, etc. that make up reality and ideologically conceiving of immediate happenings as something natural and, in turn, immutable. For Adorno, the phenomenon of second nature included society's *mis*understanding of nature as something pristine and unmediated:

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[22] This perspective was later shared by Debord ([1971] 2007).

[23] Restricted to human relations, Adorno's claims were very similar to Simmel's theorization of life's (human creation and subjectivity) repetitive reifications into "forms."

The more relentlessly the process of societalization spins its web around every

aspect of immediate human and interpersonal relations, the more impossible it

becomes to recollect the historical origins of that process and the more irresistible

the external semblance of something natural. … [E]ven the elements of nature

[are transformed] into elements of this second nature. … [I]f you think of the role

played by nature today, in the ordinary sense of nature in a landscape as

contrasted with our urban, industrial civilization, you will realize that this nature

is already something planned, cultivated and organized (Adorno [1964, 1965]

2006:121; cf. 1966:357-58).

For Adorno, nature has been "captured" by civilization and reified into a "semblance" of

naturalness. That is, the biophysical environment (including the human body) (Buck-Morss

1977:55) has become second nature: a reified appearance of naturalness that is accepted as

natural, undistorted, pure, etc., due to our forgetfulness of its socio-historical mediation.[24] This

has the epistemological result of, what Marcuse ([1960] 1989:122) called a "false" or "bad"

immediacy, making the reified world seem immutable, ahistorical, and law-like—negating

opportunities for critical thinking. Again, the Frankfurt theorists were not denying the fact that

the biophysical environment preexists human conceptions and interference, but that in modern

civilization, "to a certain extent … nothing is unaffected by mediation, which is total" (Adorno

1966:357).[25] This assumption has important implications for the analysis of societal-

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[24] As Adorno famously wrote to Benjamin: "all reification is forgetting" (Adorno in Adorno and Benjamin [1994] 1999:321). It should be noted that Cronon also used the terms "first" and "second" nature in his celebrated *Nature's Metropolis* (1991) in a similar way as Adorno's usage. Like Adorno, he describes the process of first nature becoming second nature—the "merging" of first and second nature (1991:267). Unlike Adorno, Cronon's use of second nature does not seem to imply the process of reification.

[25] Adorno's thesis may sound grand but many influential scientific assertions reflect this general claim: the theory that human society has become a global geophysical force ("Anthropocene") (Crutzen 2002), the realization that there is not a single "pristine" ecosystem (i.e. unaffected by humans) (Gallagher and Carpenter 1997), the claim that there are more "anthromes" (human dominated biomes) than biomes proper covering Earth's surface (Ellis

environmental interactions, both intellectually and normatively. The reified world, including

reified nature, is "both an actuality and at the same time a socially necessary illusion [ideology]"

(Adorno [1964, 1965] 2006:118). It is actual in that it exists (e.g. global deforestation actually

occurs). It becomes ideology when it is perceived as law-like, fixed, and *natural*,[26] as "the myth

of things as they really are" (Horkheimer and Adorno [1944] 1969:x).[27] Stated negatively, if

social theorists do not expose the historical and socially contingent origins of society's current

symbolic and non-symbolic relationships with nature, they simultaneously *naturalize* humanity's

instrumental view and treatment of nature.[28] Stated affirmatively, the primary, practical

importance of theorizing the socially mediated components of nature is that it denaturalizes

society's relationship with nature and, following, can open doors to explore better, more

substantively rational ways of organizing society's relationship with nature. Many social

constructionist assumptions are necessary for uncovering, examining, and critiquing a

fundamental concept of Marxism: ideology. A mild constructionist framework seems necessary

for environmental sociology to comprehend and critique "the mystical consciousness, the

consciousness which is unclear to itself" (Marx [1843] 1978:15).

For those who fear that the recognition of nature's social mediation will lead to extreme

relativism, climate change denial, rejection of natural limits and laws, etc., this is not an issue

within the framework of critical theory. To quote Horkheimer ([1937] 1972a:183) again, it is

"inadmissible to run counter to the tested results of science." Today, this includes climate

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and Ramankutty 2008), or research that documents the increasing intensity and reach of interactions between human and natural systems (Liu et al. 2007a; 2007b).

[26] For example, "famines are natural catastrophes wrought by society and precisely not by nature" (Adorno 1998b:141).

[27] Herein lies the fundamental deficit of positivism and other forms of naïve empiricism.

[28] This is Vogel's (1996) primary thesis and he has elaborated upon it far more impeccably than I can here. However, I do not fully agree with Vogel's interpretation and revisions. In his attempt to show the benefits of a constructionist framework he eliminates the healthy tension the first-generation left between realism and constructionism and first and second nature.

science, environmental impact assessments, and other environmental sciences. Further, the Frankfurt School's "constructionism" was not simply another sociology of knowledge. Adorno (1966:197f) rejected this label due to the relativism inherent in it (likely due to Mannheim's reduction of all knowledge to ideology). Critical theory is largely a normative critique of ideology, which presupposes that the distinction between revolutionary consciousness and false consciousness is a useful one and that the former can and should submit the latter to immanent criticism.[29] Perhaps rethinking Horkheimer's (1947:126) examination of objective and subjective reason in relation to its applications for social epistemology can also provide a resolution for the constructionism/realism debate in environmental sociology: "[w]ithout committing the fallacy of equating nature and reason, mankind must try to [intellectually] reconcile the two." Horkheimer was just as critical of reversions to old objective systems of thought (e.g. neo-Thomism) as he was of a totalizing subjective reason. The former tended to drift into dogmatism and idealistic romanticism and the latter into vulgar materialism. Reconsidering Horkheimer's analysis can help us find an alternative between an idealist "strong" constructionism and vulgar materialism and naïve empiricism:

> [t]he real difficulty in the problem of the relation between spirit and nature is that hypostatizing the polarity of these two entities is as impermissible as reducing one of them to the other. … [C]oncepts become inadequate, empty, false, when they are abstracted from the process through which they have been obtained. … The two poles cannot be reduced to a monistic principle, yet their duality too must be largely understood as a [social] product (Horkheimer 1947:171).

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[29] This is the most fundamental, though one of the many, discontinuities between critical theory and postmodernism.

The task in environmental sociology's realism/constructionism debate should be to "foster a mutual critique and thus, if possible, to prepare in the intellectual realm the reconciliation of the two in reality" (Horkheimer 1947:174). By quoting this passage, I mean that environmental sociology must submit both vulgar materialism and strong constructionism to critique. The objective should not "seek a middle ground between the two," but, instead, to "oppose them through the extremes themselves [and convict] them of untruth by their own ideas" (Adorno 1966:35).[30] I believe critical theory provides the tools to do so (immanent critique) as well as an embryotic yet developable alternative to both. Like critical theory, environmental sociology must strive to develop a logical scheme that takes both objective and subjective worlds into account so to reach "a comprehensive theory of the basic categories and relations of society, nature, and history" (Horkheimer 1972:168).

RECONCILIATION OF SOCIETY AND NATURE

"[N]ature, too, awaits the revolution!"

Herbert Marcuse, *Counterrevolution and Revolt* (1972:74)

Both critical theory and environmental sociology hope to transcend the dichotomy between theory and practice. That is, to a certain extent, both environmental sociology and critical theory are normative projects. Finding solutions to environmental problems and crises are fundamental topics of environmental sociology (Dunlap and Rosa 2000; e.g. King and McCarthy 2009). Likewise, the project of critical theory embraced a sustained normative commitment to

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[30] This style of social and intellectual criticism is what makes the works of critical theory (especially Adorno's treatises) seemingly impenetrable at times and even agonizing. When examining and criticizing systems of thought or popular ideologies, the dialectical approach taken was not the Hegelian "both/and," but a negative "neither/nor." The purpose of often leaving the alternative "unnamed" was not to purposely hide meaning and create confusion (obfuscationism), but to leave their (anti-)system of thought open to change with changing material conditions and contradictions—to "make way" for reconciling intellectual contradictions *that can only be reconciled after they are negated in reality* (e.g. Adorno 1966:10-11, 144f).

improving society's relationship with nature. The term reconciliation (*Versöhnung*)[31] signified

the normative project of creating a more harmonious relationship between humanity and nature

in practice and, in thought, the "transformation of our relation to and knowledge of nature such

that nature would once again be taken as purposeful, meaningful or as possessing value"

(Whitebook 1979:55). For the Frankfurt School, capitalism was inherently antagonistic toward

this goal (see section "Capitalism and Nature") so the possibility of reconciliation presupposed a

substantively rational, socialist society capable of combining central planning and direct

democracy (Marcuse 1964:252). Thus, the writings concerning reconciliation are often in

passing (Horkheimer and Adorno) or openly utopian in nature (Marcuse). However, both

Marcuse and, to a lesser extent, Horkheimer provided explanations of what would need to take

place within capitalism to create a reconciled condition.

Reconciliation with nature referred to both a harmony between human passion and reason

(e.g. Alford 1993) and a harmony between society and the biophysical environment. In this

section I will focus on the Frankfurt School's theorization of the reconciliation between

humanity and the external environment; however, it is worth briefly explaining what the

reconciled human individual would entail as it also relates to humanity's relation with external

nature. This connection is made more explicit in Marcuse's thought, though Adorno and

Horkheimer also viewed the liberation of humanity and nature as inseparable goals (for account

and critique, see Habermas [1969] 1983:107f). Internally, the critical theorists described

reconciliation as a harmony between human passions and reason that was non-repressive and

nondestructive—possibilities that Freud, a major influence on the early Frankfurt School, felt

impossible:

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[31] The term is translated as "reconcilement" in *Negative Dialectics* (1966).

[t]he ego can be healed only by becoming reconciled with the unconscious,

knowingly and freely following it where it leads. … [T]he true human being

would be not the one who suppressed his drives but rather the one who looked

them in the eye and fulfilled them without doing them violence and without

subjecting himself to their power (Adorno [1961] 1992:106; cf. 1966:207; [1933]

1989:120).

The rational hedonism implied Adorno's conception of a reconciliation of *Geist* and nature was

balanced by a calm, almost renunciatory, passivity inspired by observing sedentary animals

(Adorno [1951] 1974:156-57; cf. Adorno and Horkheimer's conversation about animals, [1989]

2011:16) (see Chapter 2). Marcuse (1955, 1964) famously described the outcome of

reconciliation between the passions and reason as "non-repressive sublimation." In a non-

repressive society, Marcuse claimed that reason could guide the expansion Eros (the life-

instinct[s]), and vice versa, to seek gratification in other spheres of life in a nondestructive

way—including the environment (e.g. Marcuse 1964:73). Horkheimer was less explicit than

Marcuse and Adorno, but a similar goal seems to be implicit in his critique of capitalism's

termination of self-directed pleasure. For Horkheimer, the domination of human passion in

capitalist societies is rationalized as a service to "higher values"—for God, a secular common

good, etc.—but is, at bottom, necessary, as the "unrationalized, free pleasure which is sought

without justification" interferes with a smooth-running economic system (Horkheimer [1936]

1993:57). For Horkheimer ([1936] 1993:108), a guiltless and spontaneous pursuit of pleasure

might become a nondestructive possibility in a different society: "[t]he badness of egoism lies

not in itself but in the historical situation; when this changes, its conception will merge with that

of the rational society."

Before discussing the theorization of humanity's reconciliation with nonhuman nature, it should be made clear that the Frankfurt School was explicitly against a romantic "return" to nature or a more natural Golden Age.[32] That is, the process of creating a reconciled condition must be *non-regressive*. All three theorists stated society must move forward and would need to depend on enlightened reason, though one free from "entanglement in blind domination," to create a better world (Horkheimer and Adorno [1944] 1969:xvi). For Adorno ([1963, 1969] 1998:158), romanticism was merely a conservative realization of their domination thesis, or, "the fact that spirit is terrified by the contradiction in its own development and that it tries—vainly, of course—to rectify this contradiction through recourse to what it had estranged itself from [i.e. nature]." Horkheimer (1947:127) claimed that those who "exalt nature or primitivism at the expense of spirit do not favor reconciliation with nature; on the contrary, they emphasize coldness and blindness toward nature. … The sole way of assisting nature is to unshackle its seeming opposite, independent thought." Because nature is a historical entity shaped by human practice, Marcuse (1972:60) claimed that the:

> "liberation of nature" cannot mean returning to a pre-technological stage, but advancing to the use of the achievements of technological civilization for freeing man and nature from the destructive abuse of science and technology in the service of exploitation (cf. 1964:238).

For Marcuse, a regressive-free state of reconciliation required two interrelated preconditions: (1) that humanity develop an aesthetic morality, ethos, or attitude toward nature and, suggested in the above quotation, (2) that a "new" science and technology are used to "liberate" nature, rather than dominate it.

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[32] This is why Wiggershaus (1994:581) is wrong, echoing Habermas, to claim that reconciliation for the Frankfurt School would entail a masochistic-like submission to nature, or, a "surrendering self to an amorphous nature."

Marcuse used the term "aesthetic" to signify both of its common meanings: beauty and sensibility. An aesthetic attitude toward nature meant the ability to view inherent beauty in nature as well as bond with external nature with an "erotic," new sensibility, as symbolized by the orphic myth (Marcuse 1955:151). Likewise, Marcuse ([1979] 1992:36) claimed that the attempt to protect the environment would help human beings psychically, to "subordinate destructive energy to erotic energy." Drawing from Marx ([1844] 1964:139f, 181), Marcuse argued that the aesthetic ethos could recognize nature as a "subject-object," making utilization of natural resources in a (true) socialist society qualitatively different from capitalism's: "its 'human appropriation' would be nonviolent, nondestructive: oriented on the life-enhancing, sensuous, aesthetic qualities inherent in nature" (Marcuse 1972:67; cf. 1970:78). This is related to Marcuse's distinction between a repressive mastery and liberating mastery of nature, the latter "involves the reduction of misery, violence, and cruelty" that follows the development of a new aesthetic attitude (Marcuse 1964:236). Marcuse's notion of a liberating mastery of nature seems less Orwellian and anthropocentric when he provides an example of what "linking mastery and liberation" would look like in application:

> [c]ultivation of the soil is qualitatively different from destruction of the soil, extraction of natural resources from wasteful exploitation, clearing forests from wholesale deforestation. Poverty, disease, and cancerous growth are natural as well as human ills—their reduction and removal is liberation of life. (Marcuse 1964:240)

Although Marcuse's terminology is somewhat off-putting (the "liberation" of "nature" and "life," etc.), his call is simple: instead of using modern achievements to destroy the natural world and human beings, we ought to use them to preserve and foster the natural world and human

beings. Similarly, the aesthetic morality "insist[s] on cleaning the earth from the very material garbage produced by the spirit of capitalism, and from this spirit itself" (Marcuse 1969:28). As a social-historical human activity, Marcuse claimed a new science and technology would necessarily follow the aesthetic attitude toward nature. A science and technology that sought to preserve and enhance life rather than dominate and destroy it:

> [f]or freedom indeed depends largely on technical progress, on the advancement of science. But this fact easily obscures the essential precondition: in order to become vehicles of freedom, science and technology would have to change their present direction and goals; they would have to be reconstructed in accord with a new sensibility—the demands of the life instincts (Marcuse 1969:19).
>
> [T]he change in the direction of progress … would also affect the very structure of science—the scientific project. Its hypotheses, without losing their rational character, would develop in an essentially different experimental context (that of a pacified world); consequentially, science would arrive at essentially different concepts of nature and establish essentially different facts (Marcuse 1964:166-67).

Marcuse believed that science would change with a changing society. More specifically, that a new science and technology, liberated from the profit motive and pure instrumentality, could protect and foster nature rather than dominate it because, in short, society would have the opportunity set new substantive *goals* (cf. Horkheimer [1932] 1972), which would also alter the construction of new technologies (Marcuse 1964:232). Although Marcuse's theorization of a new science and technology are some of his most controversial declarations (e.g. Habermas [1968, 1969] 1970:86f), the possibility of actualizing this vision remains to be seen.

Although Marcuse's writings contain the only systematic exploration of the prospect for reconciliation, there are passages left by Horkheimer and Adorno that demand attention. However, they are as opaque as they are poetic. For Adorno and Horkheimer, reconciliation is a potential only after human beings collectively *remember* that they are part of nature in a state of critical reflection. Stated differently, reconciliation is possible when nature *realizes itself* in an enlightened, truly human way: "[i]f nature is given the opportunity to mirror itself in the realm of spirit, it gains a certain tranquility by contemplating its own image" (Horkheimer 1947:179). For Adorno ([1963, 1969] 1998:148f), such a realization would result in the end of what humanity currently considers progress: the increasing and more efficient domination of nature. Genuine progress can only occur "when human beings become conscious of their own naturalness and call a halt to their own domination of nature … [W]e might say that progress occurs where it comes to an end" (Adorno [1964, 1965] 2006:152). Adorno ([1964, 1965] 2006:97) described this state of reconciliation vaguely as one in which "everything that exists would cease to exist merely for others," including humanity's purely instrumental subjection of nature (Adorno [1964, 1965] 2006:97; cf. 1966:191). For Horkheimer, reconciliation implied a nondestructive return of the "mimetic impulse." Mimesis, for the critical theorists, is the ability to learn from the environment (both human and nonhuman) through imitation, often subconsciously or unconsciously: "[m]imesis imitates the environment … the outside world is a model which the inner world must try to conform to" (Horkheimer and Adorno [1944] 1969:187). Horkheimer claimed the mimetic impulse was part of human nature, which "will always lie in wait," that can be readily exploited in a repressed, distorted form (e.g. mass anti-Semitism) (Horkheimer 1947:116). However, mimesis is "healthy when it meant the imitation of the life-affirming aspects of nature" (e.g. a child's imitation of maternal care) (Jay 1973:270). Adorno famously

designated artistic creation as a nondestructive imitation of nature, specifically its beauty (e.g. Adorno [1970] 1984:402), but also hinted at human language ([1970] 1984:108f). Earlier, Horkheimer (1947:179) made a similar declaration; briefly though explicitly:

> [l]anguage reflects the longings of the oppressed and the plight of nature, it releases the mimetic impulse. The transformation of this impulse into the universal medium of language rather than into destructive action means that potentially nihilistic energies work for reconciliation.

Unfortunately, neither Adorno nor Horkheimer explained the theoretical or practical implications of this insight for human-nature relations; specifically, if human language is a possible means to *create* a reconciled condition (e.g. democracy) (see Conclusion). An aspect of reconciliation that Horkheimer was clear about was the necessity of compassion. For Horkheimer, ([1933] 1993) the ability to share suffering with animals and the rest of nature appears to be both a channel for achieving reconciliation, as he felt compassion led to solidarity, as well as a continued capacity in a reconciled condition (see Chapter 2).

The pessimism characteristic of Horkheimer and Adorno is clearly present in their call for humanity's reconciliation with nature. Indeed, their pessimism derived from their domination thesis or, perhaps, more cynically, the domination thesis was a rationalization of their own despair and disappointment following Nazism, "late" capitalism in the West, and the failure of Marx's normative vision in the East.[33] In the process of dominating nature, humankind has been forced to dominate their own nature, creating a condition in which "the material preconditions for a free society have been created [i.e. the "forces of production"], the subjective conditions for its realization [i.e. revolutionary consciousness] … have been distorted"

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[33] One must not forget that the domination thesis is their general explanation for the failure of the proper realization of Marxism.

(Whitebook 1979:42; cf. Habermas [1969] 1983:101). Additionally, their treatises during exile and post-Second World War writings suggest that they found reconciliation to be an unlikely outcome for society and nature. For Adorno, the creation of Hagenbeck's zoological gardens (see Rothfels 2002) alone was grounds to claim that "the possibility of reconciliation" had been eliminated (Adorno [1951] 1974:116). Their wish for humanity's reconciliation with nature was another hope fastened to their hopelessness. However, the few cheerful insights Horkheimer and Adorno had to offer civilization "after Auschwitz" were reminiscent of this hope. One example should suffice to conclude this section:

> [w]ords tend to bounce off nature as they try to deliver nature's language into the hands of another language foreign to it. But this is not to say that there cannot be sunny days in southern countries which seem to be waiting to be taken notice of, never mind the teleological fallacy that seems to be implied by such a statement. When a day like this draws to a close, radiating the same peaceful brilliance it did when it began, a message seems to be inscribed in it. It says not all is lost yet, or perhaps it says, more affirmatively, that everything will be all right. (Adorno [1970] 1984:108)

CONCLUSIONS

Problematizing environmental sociology's neglect and criticisms of the Frankfurt School, I argue critical theory has much to offer the young subfield. Critical theory persistently tied the domination of nature to the domination of human beings. Indeed, this underlying, organizing issue links their earliest essays (e.g. Horkheimer [1930] 1993) to their last great works (e.g. Marcuse 1972). Their domination thesis was reiterated in their discussions regarding

instrumental rationality, science and technology, capitalism, and ideology. Further, critical theory had an underlying normative goal of improving and harmonizing society's relationship with nature. All of these topics are of current interest in environmental sociology yet the insights of the Frankfurt School are largely absent from environmental sociological literature. Continuing to ignore over forty years of scholarship that made nature an important component of social theory is untenable. Regarding the criticisms of the Frankfurt School leveled by Marxist environmental sociologists, I think communication between the classical and Western Marxist traditions in light of environmental debates and issues may manifest much more agreement than discrepancy, perhaps creating an opportunity to reconcile the now almost century-long schism (the political roots of which, fortunately or unfortunately, have been dismantled for decades).

If we are to avoid organizing society "as a vast joint-stock company for the exploitation of nature," as Adorno ([1963] 2000:145) put it, a wealth of forgotten and novel insights are indispensable. The Frankfurt School's work, though occasionally abstruse and dense, has left us many insights, especially in the realm of "relatively high-order theoretical propositions" (Buttel and Humphrey 2002:33), that environmental sociology has yet to thoroughly explore, assess, and scrutinize. Environmental sociologists must continue to create innovative conceptualizations, ideas, models, and hypotheses and the foundations of critical theory ought to take part in this process. Indeed, it is difficult to conceive of any school of social thought or single social theorist prior to the birth of modern environmentalism that discussed and problematized society's relationship with nature as consistently and thoroughly as the Frankfurt School.

CHAPTER 2

The First-Generation Frankfurt School on the Animal Question:

Foundations for a Normative Sociological Animal Studies

INTRODUCTION

"In existing without any purpose recognizable to men, animals hold out, as if for expression,

their own names, utterly impossible to exchange."

Theodor W. Adorno ([1951] 1974:228)

More than any school of social theory prior to the formation of animal studies, the thinkers

associated with Frankfurt, Germany's Institute of Social Research[34] theorized and problematized

society's troubling relationship with the rest of the animal kingdom. In the wake of humanity's

irrational domination of the animal world, they were aware of the caustic irony and dishonesty of

conceptualizing the human as the Aristotelian rational animal in contradistinction to the allegedly

irrational nonhuman animal.[35] For early critical theory, society's relationship with the animal

embodied the human irrationality produced by unconstrained instrumental reason. This paradox

has existed from antiquity to the modern times, manifesting itself both conceptually and in

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[34] Although sufficiently addressing this issue lies outside of the confines of this research, it should be noted that Habermas did not fully inherit the normative vision of the first-generation regarding human-animal relations. Reminiscent of Kant's doctrine of indirect duties toward animals, Habermas' communicative ethics exclude animals from our moral "universe": "[a]nimals benefit *for their own sake* from the moral duties which we are held to respect in our dealings with sentient creatures. Nevertheless, they do not belong to the universe of members who address intersubjectively accepted rules and orders *to one another*" (Habermas 2003:33). However, he has been willing to consider the possibility of "quasi-moral" duties for domesticated animals (Habermas 1993:105-11). For a perhaps too ruthless critique of Habermas' anthropocentrism, see Nelson (2011).

[35] It should be noted that the critical theorists often used the terms "(un)reason" and "(ir)rationality" counterintuitively and ironically. They maintained that reason had self-terminated into myth and blind domination when formal, instrumental rationality became the only accepted type of rationality in modern societies. The one-sided proliferation of instrumental reason occurs at the expense of developing a form of reason capable of creating substantive end goals, which requires moral and aesthetic reflection (a type of reason they referred to as substantive or objective reason).

physical, brute domination. Conceptually, the exaggerated distinction between human and

animal has been foundational to Western thought:

> [t]he idea of man in European history is expressed in the way in which he is
>
> distinguished from the animal. Animal irrationality is adduced as proof of human
>
> dignity. This contrast has been reiterated with such persistence and unanimity by
>
> all the predecessors of bourgeois thought—by the ancient Jews, Stoics, Fathers of
>
> the Church, and then throughout the Middle Ages down to modern times—that
>
> few ideas have taken such a hold on Western anthropology. The antithesis is still
>
> accepted today (Horkheimer and Adorno [1944] 1969:245).

Similarly, the barbarous treatment of animals in modern societies is merely a continuation,

though intensification, of a long tradition of instrumental, unreflective brutalization:

> [u]nreasoning creatures have encountered reason throughout the ages—in war and
>
> peace, in arena and slaughterhouse, from the lingering death-throes of the
>
> mammoth overpowered by a primitive tribe in the first planned assault down to
>
> the unrelenting exploitation of the animal kingdom in our days (Horkheimer and
>
> Adorno [1944] 1969:245-46).

Here I show how the Frankfurt School explored the various manifestations of the "unrelenting

exploitation" animals have experienced in human societies and why they claimed that the

domination of animals is intimately linked to the domination of human beings, especially of

women and racial and ethnic minorities. I explore the Frankfurt School's critique of German

idealism and Judeo-Christian thought for their instrumentalist attitudes toward animals. Finally,

I explain why the Frankfurt School theorists were normatively committed to compassion for

animals. In short, the animal question—"How shall we … rethink, rebuild and recast our

relationships with other animals?" (Kalof and Fitzgerald 2007:xiv)—is viewed in light of early

critical theory. The Frankfurt School's exploration of the animal question is important for two

reasons. First, if not for purely scholarly reasons, it is important to acknowledge that the

Frankfurt School was the first group of social theorists to consistently attempt to theorize human-

animal relationships. This endeavor was not only uncharacteristic of their intellectual climate,

but largely foreign to sociology as a discipline. Other authors have begun to write explicitly

about the Frankfurt School's views on human-animal relations (Bell 2010; Mendieta 2010) and

animal ethics (Gerhardt 2006; 2010; Nelson 2011).[36] I contribute to this relatively new

conversation by providing a complete yet concise depiction of their anthrozoology by

systematically compiling the Frankfurt School's writings about animals in human society and

their views on compassion for animals from their entire corpus (excluding German works that

have remained untranslated).   To my knowledge, this is the only essay that does so. Second, the

Frankfurt School has left animal studies scholars a theoretical framework for future sociological

examinations of human-animal interactions and challenge those engaged in animal studies to

make normative commitments in their scholarly work. Nibert (2003: 22) suggested that a "major

paradigm shift is necessary to set the discipline on a new course." I show that the Frankfurt

School's assessment of the animal question provides a foundation for such a shift, arguing that

they mount four challenges to sociologists today: (1) to unmask the shared forms of domination

experienced by both animals and marginalized human beings; (2) for environmental sociologists

to make animals a principle subject of investigation; (3) for sociological animal studies scholars

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[36] It is important to acknowledge that Steven Best (e.g. 2009) has developed a "critical animal studies" (CAS) that is inspired by early critical theory. Indeed, a full journal is devoted to CAS (*Journal for Critical Animal Studies*). Because it is outside the goals of this research, I will not evaluate whether or not CAS rightly maintains the critical theoretical tradition fashioned by the Frankfurt School.

to engage with philosophy; and (4) to adopt a critical and normative sociological perspective when studying human-animal relations.

As explained in Chapter 1, a central and consistent argument presented by early critical theory declared that humanity's attempt to dominate external, nonhuman nature is "reproduced" in society (Horkheimer and Adorno [1944] 1969:110). In short, they argued that the domination of nature is intimately linked to the domination of other humans and internal human nature. For the early critical theorists, what is considered technical, material, cultural, and intellectual progress in Western civilization "runs in a single strand, on the rails of the mere domination of nature" (Adorno [1963, 1969] 1998:212). In Marcuse's (1955:47) Freudo-Marxist interpretation of progress, he argued that the domination of animals and the rest of nature was a structural manifestation of sadism:

> the entire progress of civilization is rendered possible only by the transformation and utilization of the death instinct or its derivatives. The diversion of primary destructiveness from the ego to the external world feeds technological progress … In this transformation, the death instinct is brought into the service of Eros; the aggressive impulses provide energy for the continuous alteration, mastery, and exploitation of nature to the advantage of mankind. In attacking, splitting, changing, pulverizing things and animals (and, periodically, also men), man extends his domination over the world and advances to ever richer stages of civilization.

For the Frankfurt School, the domination of nature is intimately tied up in the domination of the self and other human beings. Yet unlike many contemporary socio-environmental scholars (see for example, Tovey 2003), the early critical theorists consistently incorporated the animal world

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into their analyses. The Frankfurt School investigated the sometimes troubling relations between humans and animals and uncovered many of the connections between the domination of animals and the domination of human beings.

DOMINATION ACROSS SPECIES LINES: THEIR SOCIOLOGICAL THEORIES

As stated, the Frankfurt School claimed that nature was increasingly viewed and treated as matter devoid of value to be worked up for self-preservation and to reproduce exploitative institutions.   Science, expunged of substantive end goals and embedded in a profit-maximizing system, was argued to be one of the primary institutions utilized for nature domination. The result of scientific progress for animals was most clearly seen in behaviorism's endless experiments that dominated psychology in the midcentury:

> [t]he conclusion they [animal psychologists] draw from mutilated bodies applies
>
> not to animals in the free state but to man as he is today. It shows that because he
>
> does injury to animals, he and he alone in all creation voluntarily functions as
>
> mechanically, as blindly and automatically as the twitching limbs of the victim
>
> which the specialist knows how to turn to account. The professor at the
>
> dissecting-table defines these spasms scientifically as reflexes, just as the
>
> soothsayers at the altar once proclaimed them to be signs vouchsafed by his gods.
>
> Reason, mercilessly advancing, belongs to man. The animal, from which he
>
> draws his bloody conclusion, knows only irrational terror and the urge to make an
>
> escape from which he is cut off (Horkheimer and Adorno [1944] 1969:245).

In exploring the seemingly paradoxical process of explaining human behavior through meticulously brutalizing animals, Horkheimer and Adorno mockingly elucidated the true

conclusions of behaviorists. Although the experiments do not explain the natural behaviors of a given animal, they do help us understand the robotic and senseless actions of the experimenter, as well as the irrational and alienated society, "man as he is today," that produced him. Similar to the unreflective experiments of the behaviorist vivisectionist, mass consumer society demands the distortion of animals via science: "[t]he tiny dog's features … still display the mutilated lineaments of nature. Mass industry and mass culture … have already learned how to apply scientific methods to manipulate bodies—both of pedigree animals and of humans" (Horkheimer and Adorno [1944] 1969:251). That is, the purebred animal is a "mutilated" simulation of nature for the purpose of human consumption.[37] As implied, Horkheimer and Adorno felt the same rational calculation and control that created the Pekingese dog, for example, is similarly used to dominate human beings, a "transformation to which they themselves are contributing" (Horkheimer and Adorno [1944] 1969:251).

The Frankfurt School also theorized the instrumental brutality of animal entertainment industries. For instance, Adorno critically interrogated the discontents of Carl Hagenbeck's zoological gardens, first opened throughout turn-of-the-century Germany. An animal trader and zoo owner, Hagenbeck was one of the first to display out-of-cage animals and successfully convince the public that animals benefited from being in zoos (the "Hagenbeck revolution") (see Rothfels 2002; cf. Kalof 2007:155). Heroized by many, Hagenbeck's animal display activities signified something very different for Adorno. For Adorno ([1951] 1974:115-16), Hagenbeck's zoos:

> deny the animals' freedom only the more completely by keeping the boundaries
> invisible, the sight of which would inflame the longing for open spaces. … The
> more purely nature is preserved and transplanted by civilization, the more

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[37] One assumes that the Frankfurt School understood that artificial selection existed prior to the culture industry.

implacably it is dominated. … The fact, however, that animals really suffer more

in cages than in the open range, that Hagenbeck does in fact represent a step

forward in humanity, reflects on the inescapability of imprisonment. … Only in

the irrationality of civilization itself, in the nooks and crannies of the cities, to

which the walls, towers and bastions of the zoos wedged among them are merely

an addition, can nature be conserved.

Adorno applies a central tenet of critical theory to human-animal relations: modern societies

extend liberty to deny it more fully (e.g. Marcuse 1964). The fact that animals are put on display

in the "irrationality of civilization" is not critically questioned by society, but soothed in the

guiltless reform of transferring animals from cage to pit, making captivity simultaneously less

painful and more inexorable. Horkheimer also interrogated the role of animals as entertainment.

In one of his many brilliant post-Second World War notes, Horkheimer described the

interdependent layers of human and animal oppression represented in a single circus act:

[t]hrough the image of the elephant in the circus, man's technological superiority

becomes conscious of itself. With whip and iron hooks, the ponderous animal is

brought in. On command, it raises its right, its left foot, its trunk, describes a

circle, lies down laboriously and finally, as the whip is being cracked, it stands on

two legs which can barely support the heavy body. For many hundreds of years,

that's what the elephant has had to do to please people. … In the arena, where the

elephant looks like the image of eternal wisdom as it confronts the stupidity of the

spectators and where, among fools, it makes a few foolish gestures for the sake of

peace and quiet, the objective unreason of the compulsory service which serves

the rational purpose of the Indian timber market still reveals itself. That men

depend on such labor to then be obliged to subject themselves to it as well is

ultimately their own disgrace. The enslavement of the animal as the mediation of

their existence through work that goes against their own and alien nature has the

result that that existence is as external to them as the circus act is to the animal

(Horkheimer [1934, 1974] 1978:145).

From their capture and domestication for the Indian timber industry to the modern circus, the

elephant's self is not only alienated, but also *mediates* the alienation of human beings, both as an

instrument of labor and spectacle.

Early critical theory's fundamental social-ecological thesis, that domination of nature

necessarily involves the domination of humans, was also incorporated into their analyses of

racism and anti-Semitism. For instance, Adorno ([1951] 1974:105) maintained that:

[t]he constantly encountered assertion that savages, blacks, Japanese are like

animals, monkeys for example, is the key to the pogrom. The possibility of

pogroms is decided in the moment when the gaze of a fatally wounded animal

falls on a human being. The defiance with which he repels this gaze—'after all,

it's only an animal'—reappears irresistibly in cruelties done to human beings, the

perpetrators having again and again to reassure themselves that it is 'only an

animal', because they could never fully believe this even of animals.

Similarly, in *Dialectic of Enlightenment*, Horkheimer and Adorno ([1944] 1969:252) stated that

"[a]n over-accentuated human face, an embarrassing reminder of its origin in and degeneration

from nature, now arouses only an irresistible urge to indulge in efficient manslaughter." Both of

these passages infer that the destruction of human beings, especially racial and ethnic minorities,

is related to human disgust of their supposed animality, or rather, racialized notions of animality

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serve as justification for the brutal treatment of marginalized humans (cf. Roberts 2008). But, for the Frankfurt School, this chain of domination *starts* with humanity's material exploitation and conceptual degradation of animals. As Adorno lyrically put it, "Auschwitz begins wherever someone looks at a slaughterhouse and thinks: they're only animals" (quoted in Patterson 2002:53).[38] This view was not restricted to their academic writings. In a 1945 letter written to Ned R. Healy, the exiled Horkheimer pled for the California Representative to help pass a bill to ban the vivisection of living dogs. Horkheimer argued that his escape from Nazi Germany as a Jew partially qualified him to "say a word in this matter." In the letter, Horkheimer (2007:227-28) stated that:

> [t]he vivisection laboratory is the practicing ground of the death camp. The desire of the totalitarian sadists to label their perspective victims as members of other races was motivated by the fact that race is a natural, not a social category. Since modern man is accustomed to treat anything in nature as a subject of power, as a means to his own ends, since nature is outlawed, so to speak, humans who are denounced as members of a different race, are outlawed themselves. The ultimate consequence of this doctrine is the mutual extermination of mankind, and the doctrine itself is the consequence of mankind's blindness to nature.

In other words, humanity's one-sided, instrumental view of nature delivered the *justification* for the exterminations that followed the naturalization of racial categories. Further, naturalizing human differences can only lead to brutality if nature is already viewed as matter to be dominated without moral consideration. Thus, Horkheimer concluded his letter by claiming "the fight for the animal … is a fight for man."

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[38] I am somewhat uncomfortable citing this passage as I am unable to locate the original work in which Adorno allegedly made this statement.

Yet one must not forget that Nazi Germany was the only Western country that enacted

humane legislation to protect animals in the mid-twentieth century, especially from vivisection.

The penchant that Nazi Germany had for the humane treatment of animals while at the same time

advancing the extermination of entire categories of humans is a paradoxical circumstance that

has not received enough social investigation and interpretation (with the exception of Sax 2000).

The early critical theorists explained this apparent paradox by theorizing that anti-Semites show

interest in and sentimentality for animals in order to further shame the humans they are

oppressing (Horkheimer and Adorno [1944] 1969:253). Indeed, as Sax (2000) showed,

Nazism's distaste of kosher slaughter and vivisection was at least partially due to their anti-

Semitism and distorted image of Jewish customs. For the Frankfurt School, Nazism's emphasis

on, and professed love for, nature was a ruse for human domination:

> [w]hen industrial magnates and Fascist leaders want to have pets around them,
>
> their choice falls not on terriers but on Great Danes and lion cubs. These are
>
> intended to add spice to power through the terror they inspire. The murderous
>
> Fascist colossus stands so blindly before nature that he sees animals only as a
>
> means of humiliating men. … The Fascist's passionate interest in animals, nature,
>
> and children is rooted in the lust to persecute (Horkheimer and Adorno [1944]
>
> 1969:253).

Similarly, in "Egoism and Freedom Movements" ([1936] 1993), Horkheimer argued that

powerful, brutal individuals are often good-natured toward children and animals. The fate of

animals:

> in our [European] civilization reflects all of the coldness and callousness of the
>
> prevailing human type. Nevertheless, when such individuals consciously resort to

especially bloody means, if they have not exactly discovered their love for

animals, then they at least tend to assert it. … Sentimental love for animals is one

of the ideological institutions in this society. It is not a universal solidarity that

naturally extends itself to encompass these living creatures, but rather an alibi for

one's own narcissism and for the public consciousness, a test of one's conformity

to the ideal morality, as it were (Horkheimer [1936] 1993:107).

The sentimentality for "innocence" in modernity is interpreted by Horkheimer and Adorno as a

diluted mask for selfishness and destructiveness. Yet even those who "naturally" feel solidarity

with animals are often forced to dominate them. In a psychoanalytically-charged note

concerning peasants, Horkheimer asserted that:

[t]hrough their daily contact with them, those who breed domestic animals

discover something of their individuality, their trusting life. The resistance

against murdering what one protects, against its sale to the butcher, is repressed

into the lowest layers of the psyche and rises with bloodshot eyes when they vent

their fury against the illegal glutton that is so much more harmless than the

treacherous shepherd. In the murder of the wolf, one silences one's own

conscience (Horkheimer [1934, 1974] 1978:133).

One wonders how Horkheimer would interpret the current destruction of wolves by ranchers and

farmers in the name of livestock protection.

Reiterating the role of instrumental reason in animal brutalization, Horkheimer and

Adorno provided additional examples of the consequence for animals when nature is viewed

strictly as amorphous matter to be utilized for human ends:

[a]nimals are only remembered when the few remaining specimens … perish in

excruciating pain, as a capital loss for their owner who failed to afford them

adequate fire protection in an age of concrete and steel. … In Africa, the last part

of the earth where a futile attempt is made to preserve their dwindling herds, they

are an obstacle to the landing bombers in the latest war. They will be completely

eradicated. The earth, now rational, no longer feels the need of an aesthetic

reflection (Horkheimer and Adorno [1944] 1969:251).

Again referring to the destruction of elephant herds in Africa, Horkheimer claimed that such

instrumental treatment of animals is, at least partly, a vestige of Judeo-Christian theology:

[a newspaper article] reported that landings of planes in Africa were often

hampered by herds of elephants and other beasts. Animals are here considered

simply as obstructers of traffic. This mentality of man as the master can be traced

back to the first chapters of Genesis. … Only man's soul can be saved; animals

have but the right to suffer (Horkheimer 1947:104).

Perhaps a remnant of Schopenhauer's early (yet sustained) influence on Horkheimer (Schmidt

1993; Gunderson 2012),[39] he often criticized Christian society's insincere and incomplete moral

doctrine of compassion. In his earliest writings, Horkheimer described two scenes of animal

cruelty that embodied the "immeasurable" chasm between Christian moral principles and actual

conduct (Horkheimer [1934, 1974] 1978:88). The first scene involved a group entertaining:

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[39] "[Christianity] now tries to accept man entirely by himself and regards animals positively as *things* … [T]he Creator (Genesis 1 and 9) hands over to man all the animals, just as if they were mere things and without any recommendation to their being properly treated … The Creator hands them over so that man may *rule* over them and thus may do what he likes with them … The fault lies with the Jewish view that regards the animal as something manufactured for man's use … [L]ook at the revolting and outrageous wickedness with which our Christian mob treat animals, laughing as they kill them without aim or object, maiming and torturing them … It might truly be said that men are the devils of this earth and animals the tortured souls" (Schopenhauer [1851] 1974:370-71).

themselves by having doves startled from their dark boxes in which they had been

kept up to this moment. Blinded by the light and fluttering and swaying for the

first few seconds of their freedom, these birds were then shot down. When one of

the wounded animals fell on the surrounding grass, a trained dog picked it up. If

it escaped to a nearby rock, boys followed it there. If it was lucky enough to

make its way out to sea uninjured … it was trusting enough to soon return to its

point of departure, for it had understood nothing of what went on (Horkheimer

[1934, 1974] 1978:90).

The second scene described by Horkheimer was of a film in which a lamb was tied down to bait

a leopard. After the leopard mutilated the lamb, the leopard was shot, followed by a "humorous"

caption about "Mr. Leopard's" inability to go for walks anymore. Of course, both the dove and

the lamb are important symbols in Christian theology:

[u]sually, primitives do not devour their sacred or totem animals. The Christians

make symbols of them. They don't worship the animals but in or through them

they revere the deity, and this is the reason the animals are not spared in reality.

… It is not part of life in this civilization to take religion seriously. … [T]he poor

and powerless are worshipped in religion, i.e., in spirit, but mistreated in reality

(Horkheimer [1934, 1974] 1978:91).

Here, Horkheimer argues that historically Christian societies instrumentally utilize animal

symbols to honor a deity while simultaneously allowing the weak and helpless to be neglected in

material life. Like Horkheimer (1947:104), Marcuse criticized theological justifications for

animal cruelty. In response to the religious declaration that humans have no moral duties toward

animals because they have no soul, Marcuse (1964:237) declared that:

[m]aterialism, which is not tainted by such ideological abuse of the soul, has a

more universal and realistic concept of salvation. It admits the reality of Hell

only at one definite place, here on earth, and asserts that this Hell was created by

Man (and by Nature). Part of this Hell is the ill-treatment of animals—the work

of a human society whose rationality is still the irrational.

As stated above, the amount of destructiveness human societies reap upon animals is a

confirmation of instrumental reason's unreason. Further, for Marcuse, materialist assumptions

make it impossible to justify the brutalization of animals. This assertion was also shared by

Adorno. Like Judeo-Christian thought, Adorno claimed idealism was rooted in an exaggerated

distinction between human and animals. To quote one of the many examples from Adorno's

([1993] 1998:80) work which fiercely condemned the place of nature in idealism:

[n]othing is more abhorrent to the Kantian than a reminder of the resemblance of

human beings to animals. This taboo is at work when the idealist berates the

materialist. Animals play for the idealist system virtually the same role as the

Jews for fascism. To revile human animality—that is genuine idealism. To deny

the possibility of salvation for animals absolutely and at any price is the inviolable

boundary of its metaphysics.

Adorno (1966) maintained that idealism fails to grasp the qualitative differences that exist in

nature; nature's "nonidentity" (the uniqueness and autonomy of the given object) in relation

human thought. Specifically for animals, idealism is incapable of extending moral concern

across species boundaries. The sole German idealist whom both Adorno and Horkheimer

commended for his conception of nature, specifically of animals, was Arthur Schopenhauer,

whose call for "boundless compassion" for animals was atypical in German idealism (and in Western philosophy as a whole).

COMPASSION FOR ANIMALS: THEIR NORMATIVE THEORIES

In addition to theorizing and problematizing society's relations with animals, Horkheimer and Adorno supported a system of animals ethics based on compassion (*Mitleid*; literally, "suffering with [another]"). For Horkheimer and Adorno ([1944] 1969:248), an animal "is doomed by its lack of reason to inhabit its form for ever—that is, unless man, who is one with it through the past, discovers the redeeming formula and succeeds in softening the stony heart of eternity at the end of time." The key to accomplishing this goal lies in a willingness to extend compassion to animals ("softening the stony heart") by remembering humanity's animality ("who is one with it through the past").

As Gerhardt (2010) has shown, Horkheimer and Adorno's support of compassion for animals can largely be explained by Arthur Schopenhauer's influence (cf. Tarr 2011:54-55). Schopenhauer's anti-deontological ethics were founded on an intuitive identification with the suffering of others; including animals. He thoroughly criticized his contemporaries, and Western thought as a whole, for "forgetting" animals and claimed that his ethical system's protection of animals provided proof that his system was "genuine." For Schopenhauer, it was necessary for human beings to recognize their essential similarity with animals and end the "tortures that are inflicted" on the animal world by human society (see especially Schopenhauer [1840] 1965:175f; cf. Gunderson 2013). Schopenhauer's system of ethics influenced Horkheimer and Adorno greatly, especially in the former's early writings. In "Materialism and Morality," Horkheimer declared that compassion was the moral sentiment appropriate for creating a better society. It

arises "out of the privation of the present" and can aid humanity's drive toward "the free development of their [humanity's] creative powers [i.e. socialism]" ([1933] 1993:34). Compassion was argued to be a means to find solidarity with suffering workers and, for Horkheimer, an active and practical ethic that could aid the building of a socialist society. However, Horkheimer did not limit compassion to relationships between human beings:

> [t]he solidarity of human beings … is a part of the solidarity of life in general. Progress in the realization of the former will also strengthen our sense of the latter. Animals need human beings. It is the accomplishment of Schopenhauer's philosophy to have wholly illuminated the unity between us and them. The greater gifts of human beings, above all reason, by no means annul the communion which they feel with animals. To be sure, the traits of human beings have a certain imprint, but the relationship of their happiness and misery with the life of animals is manifest (Horkheimer [1933] 1993:36; cf. Adorno [1963] 2000:145).

For Horkheimer, the primordial likeness of humans and animals illuminated in Schopenhauerian philosophy ought to be taken seriously—both as a as a means to create solidarity with suffering animals and to end society's exploitation of the animal world. This is what is meant by the claim, "[a]nimals *need* human beings."

However, the coldness and instrumentality characteristic of bourgeois society, specifically of modern man, has erected boundaries between humans and animals. They claimed that men who show respect for animals or care for them in modern societies are seen as abandoners of rationality. The act is discarded as "a betrayal of progress" (Horkheimer and Adorno [1944] 1969:254). In a comment that is reminiscent of later ecofeminist claims, the

authors of *Dialectic of Enlightenment* argued that "to feel concern about an irrational creature is a futile occupation [in modern societies]. Western civilization has left this to women" (Horkheimer and Adorno [1944] 1969:247). For example, Spinoza ([1677] 1951:213), the classical hero of deep ecology, argued "that the law against the slaughtering of animals is founded rather on vain superstition and womanish pity than on sound reason." All three theorists argued that women experienced parallel forms of domination as animals and, as co-sufferers, play a special role in protecting animals from the horrors of modernity. The relationship between women and nature holds a contradictory place in critical theory and should be commented on briefly. On the one hand, the Frankfurt School claimed that the conception and treatment of woman as the more "natural" of the sexes—more intuitive, corporal, sympathetic, less rational, etc.—and closer to nature than man (for an extended discussion, see Plumwood 1993) is a socially determined byproduct of a patriarchal society (Horkheimer and Adorno [1944] 1969:249). As Jay (1973:265) explained, "[w]omen, reduced to their biological function alone, were robbed of subjectivity," justifying their domination as a natural object. On the other hand, this social construction and treatment could inadvertently help improve humanity's relationship with nature, especially with animals.

> Since the earliest division of labor, woman:
>
> became the embodiment of the biological function, the image of nature, the
> subjugation of which constituted that civilization's title to fame. For millennia
> men dreamed of acquiring absolute mastery over nature, of converting the cosmos
> into one immense hunting-ground. … This was the significance of reason, his
> proudest boast. Woman was weaker and smaller. Between her and man there
> was a difference she could not bridge—a difference imposed by nature, the most

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humiliating that can exist in a male-dominated society (Horkheimer and Adorno

[1944] 1969:248).

While there is diversity in the sexual division of labor in hunter-gatherer societies (Panter-Brick 2002) and speculating about the grand goals of the early male hunter is certainly suspect, their chief point should not be lost. They were suggesting that the domination of animals and the domination of women were dually born out of, and continue to be sustained by, instrumentality—an instrumentality, one should note, that is not divorced from material life. Although consciously planned and implemented hunts are instrumental by definition, they do not seem to be conflating early predation and the instrumental reason of the mid-twentieth century. The point appears to be that predation and early forms of patriarchy contained the seeds of the unconstrained instrumental reason we see today. Christendom continued this tradition. For Horkheimer and Adorno, Christianity's claim to revere woman was a guise for the Christian man's contempt and hatred for woman's assumed closeness to nature, a tradition continued in modern societies (which Horkheimer and Adorno famously claimed was paradoxically exemplified in De Sade's brutal, libertine-derived sexism):

> [m]an as ruler denies woman the honor of individualization. Socially, the
> individual is an example of the species, a representative of her sex; and therefore
> male logic sees her wholly as standing for nature, as the substrate of never-ending
> subsumption notionally, and of never-ending subjection in reality. Woman as an
> alleged natural being is a product of history, which denaturizes her (Horkheimer
> and Adorno [1944] 1969:111).

Viewing women similar to animals and the rest of nature—undifferentiated—not only justifies the domination of the second sex, but further incites aggression toward their "naturalness." The

secularization of society did not end the domination of the "natural" woman. In modern,

capitalist societies, women, like the rest of nature, cannot escape the processes of the culture

industry (Horkheimer and Adorno [1944] 1969:249f ; Adorno [1970] 1984:99-100). However,

their symbolic status as a representative of nature will perhaps alter society's relation with nature

in a progressive way. This position was expressed explicitly in Marcuse's *Counterrevolution*

and Revolt (1972). Like Horkheimer and Adorno, Marcuse agreed that the conception of women

as more natural than men is socially determined. However:

> it is the woman who "embodies," in a literal sense, the promise of peace, of joy,
>
> of the end of violence. Tenderness, receptivity, sensuousness have become
>
> features (or mutilated features) of her body—features of her (repressed) humanity.
>
> … That this image (and reality) of the woman has been determined by an
>
> aggressive, male-dominated society does not mean that this determination must be
>
> rejected, that the liberation of women must overcome the female "nature." This
>
> equalization of male and female would be regressive: it would be a new form of
>
> female acceptance of a male principle. Here too the historical process is
>
> dialectical: the patriarchal society has created a female image, a female counter-
>
> force, which may still become one of the gravediggers of patriarchal society
>
> (Marcuse 1972:77-78).

Marcuse viewed woman as an embodiment of Eros and man, in modern societies, as an agent of

aggressiveness and destructiveness. Thus, Marcuse (1972:75) described the end of domination

over nature and the "ascent of Eros over aggression" as "a female society" and the

"'femalization' of the male." Marcuse's, what would now be called, non-essentialist

"ecofeminism" was not shared by Adorno. Instead, Adorno claimed that what is considered natural for women was to be cast aside if all of nature were ever to be "liberated":

> [t]he feminine character, and the ideal of femininity on which it is modeled, are products of masculine society. The image of undistorted nature arises only in distortion, as its opposite. Where it claims to be humane, masculine society imperiously breeds in woman its own corrective, and shows itself through this limitation implacably the master. The feminine character is a negative imprint of domination. But therefore equally bad. Whatever is in the context of bourgeois delusion called nature, is merely the scar of social mutilation. … The liberation of nature would be to abolish its self-fabrication. Glorification of the feminine character implies the humiliation of all who bear it (Adorno [1951] 1974:95, 96).

However, like Marcuse, Horkheimer and Adorno too pointed to how women were a potential "female counter-force" to the domination of nature, specifically in protecting animals. Unfortunately, Horkheimer and Adorno never systematically theorized the role of women in saving animals from their brutalization in modern societies, a limitation being resolved by feminist scholars today (e.g. Donovan 1990; 1996).

An essential component of extending compassion to animals entails, and in some respect presupposes, the remembrance of human animality—or, more simply, the capacity to recall that human beings are also animals. For Adorno, if such a realization took place collectively it would result in the end of what humanity currently considers progress: the increasing and more efficient domination of nature (Adorno [1964, 1965] 2006:152; cf. Adorno [1963, 1969] 1998:148f). The Frankfurt School argued that a truly rational society would be capable of harmonizing society-nature relations as well as human reason and human nature, two interrelated

goals they termed, "reconciliation" (see Chapter 1). For Horkheimer and Adorno, remembering

human animality, while maintaining and heightening the constructive aspects of human reason,

was an essential step in the process of reconciliation. In one of the striking reflections in *Minima*

Moralia, entitled "*Sur l'eau* [At sea]," Adorno ([1951] 1974:156-57) portrayed a reconciled

socialist human being as a docile and contemplative animal:

> [t]he conception of unfettered activity, of uninterrupted procreation, of chubby
>
> insatiability, of freedom as frantic bustle, feeds on the bourgeois concept of nature
>
> that has always served solely to proclaim social violence as unchangeable …
>
> Perhaps the true society will grow tired of development and, out of freedom, leave
>
> possibilities unused, instead of storming under a confused compulsion to the
>
> conquest of strange stars. … *Rien faire comme une bête* [Doing nothing, like an
>
> animal], lying on water and looking peacefully at the sky, 'being, nothing else,
>
> without any further definition and fulfilment' [Hegel (1812, 1813, 1816)
>
> 2010:59], might take the place of process, act, satisfaction, and so truly keep the
>
> promise of dialectical logic that it would culminate in its origin. None of the
>
> abstract concepts comes closer to fulfilled utopia than that of eternal peace.

In this vibrant passage, Adorno argued that the attainment of peace demands a new human being

who is pleased in merely *being*, which, for Adorno, is a mode of existence exemplified by

animals. Adorno's animal preserves the capacity for reflection yet casts off the hysterical

busyness that characterizes modern human life. Indeed, Horkheimer and Adorno maintained that

animals could "teach" human beings about the good life. Gretel Adorno, Theodor's wife,

recorded a conversation in the mid-1950s that took place between these two great thinkers

regarding the possibilities of writing an updated *Communist Manifesto*. The communicators

deemed animal life as representative of the goals of happiness and freedom:

> Horkheimer: "Happpiness would be an animal condition viewed from the
>
> perspective of whatever has ceased to be animal [i.e. human reason]."
>
> Adorno: "Animals could teach us what happiness is."
>
> Horkheimer: "To achieve the condition of an animal at the level of reflection—
>
> that is freedom" (Adorno and Horkheimer [1989] 2011:16).

Inverting over two-thousand years of Western rationalistic thinking, though defenders of reason,

Horkheimer and Adorno contended that animality is something to be *regained* and *preserved* in

the unfolding of reason, rather than something to be overcome. If animals are said to embody

the seeds of happiness and freedom, Marcuse (1972:68) was right to state that "no free society is

imaginable which does not … make the concerted effort to reduce consistently the suffering

which man imposes on the animal world."

CONCLUSIONS

The contribution of the first-generation Frankfurt School for sociological animal studies today

can be abridged in four themes. Themes 1, 3, and 4 can collectively be considered the

"foundations" suggested in the chapter title and theme 2 has more specific applications related to

Chapter 1. First, animal studies scholars should continue to trace domination between species

lines, or, to unmask the shared forms of domination experienced by both animals and

marginalized human beings. Sociologists who study race, class, or gender may view their work

as lying outside the domain of animal studies. The Frankfurt School has shown this is not the

case. Women, ethnic and racial minorities, and workers were theorized as co-sufferers with

animals due to parallel and intertwined social processes, a convincing claim that should be reinvestigated today. From this perspective, the creation and progress of sociological animal studies can also be seen as an opportunity to expand more traditional sociological concerns across species lines. In short, it is important for contemporary sociologists to uncover the various interconnected and interdependent levels and forms of domination experienced by both humans and animals. Second, environmental sociologists can learn a great deal from the Frankfurt School's theorization of human-animal relations. Tovey (2003) has argued that environmental sociologists have not sufficiently incorporated animals into their analyses, rendering them "invisible," or as abstracted components of ecological systems. The Frankfurt School made the lives of animals a central component of their investigations of human-nature relations. Further, their general theory of human-nature relations, that the domination of nature is intimately linked to the domination of humans, is internally consistent with their understanding of human-animal relations. Third, Horkheimer, Adorno, and Marcuse invite sociological animal studies scholars to engage explicitly with philosophy. As sociologists continue to include nonhumans into social inquiry, they are also forced to reassess ontological, epistemological, and ethical questions and assumptions that demand reflection and discussion. More substantively, the Frankfurt School's neo-Marxist framework—fused with insights from a wide array of thinkers, such as Weber, Freud, Schopenhauer, Hegel, and Nietzsche—provides a compelling starting point for a metatheory capable of exploring and conceptualizing the ways human societies affect animal life and vice versa. Lastly, and most importantly, to honestly and systematically grasp the many horrors experienced by animals in the name of food, science, entertainment, and fashion, a critical approach toward human-animal relations is necessary. The Frankfurt School challenges contemporary animal studies scholars to make normative

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commitments in their research. For Adorno and Horkheimer, we must be willing to extend

compassion to animals by remembering our own animality, to help dialectical thought return to

its origin.

In a simple yet lucid analogy entitled "The Skyscraper," the young Horkheimer ([1934, 1974] 1978:66-67) contended that society is built upon the suffering of animals (hardly a

common thesis in stratification research). Describing the hierarchical stratums of capitalist

society, Horkheimer argued that beneath the monopoly capitalists, the petite bourgeoisie and

landowners, the service workers and bureaucrats, the skilled industrial workers, and the

unskilled, the unemployed, ill, and poor lies the foundations of capitalist society, where "we

encounter the actual foundation of misery" which kept Horkheimer's skyscraper erect. Even

below people of the colonized world lies:

> the indescribable, unimaginable suffering of the animals, the animal hell in human
>
> society …, the sweat, blood, despair of the animals. … The basement of that
>
> house is a slaughterhouse, its roof a cathedral, but from the windows of the upper
>
> floors, it affords a really beautiful view of the starry heavens (Horkheimer [1934,
>
> 1974] 1978:66-67).

In their writings of the mid-twentieth century, the Frankfurt School can be viewed as mounting a

challenge to contemporary social theorists to take the animal question seriously, as the animal

suffering theorized by Horkheimer, Adorno, and Marcuse has increased dramatically since.

Social theorists ought to, following Horkheimer's analogy, enter society's basement for analysis

and critique.

CHAPTER 3

Erich Fromm's Ecological Messianism:

The First Biophilia Hypothesis as Humanistic Social Theory

INTRODUCTION

Following Rachel Carson's groundbreaking *Silent Spring* (1962), a series of works warning

humanity of environmental problems and a looming ecological crisis were published in the early

1970s (e.g. Ehrlich and Ehrlich 1970; Meadows et al. 1972; Schumacher 1973; Mesarovic and

Eduard 1974). Perhaps surprisingly, another early commentator on environmental degradation

was the Freudo-Marxist sociologist and humanistic psychoanalyst, Erich Fromm. In *The*

Anatomy of Human Destructiveness, Fromm (1973:389) argued that:

> Man,[40] in the name of progress, is transforming the world into a stinking and
>
> poisonous place (and this is not symbolic). He pollutes the air, the water, the soil,
>
> the animals—and himself. He is doing this to a degree that has made it doubtful
>
> whether the earth will still be livable within a hundred years from now. He knows
>
> the facts, but in spite of many protesters, those in charge go on in the pursuit of
>
> technical "progress" and are willing to sacrifice all life in the worship of their
>
> idol.

With a warming planet, biodiversity loss, dwindling freshwater sources, and environmental

health risks, this idol worship continues. For Fromm, environmental destruction resulted from

the failure of human beings to develop a non-destructive unity with nature, a relatedness to the

world he termed "biophilia," or, love of life. The goal of this essay is to demonstrate how

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[40] It should be noted that Fromm used the term "man" to mean the nonsex-differentiated German term *Mensch*, roughly, "human being or the human race" (Fromm 1976:xx; cf. 1973:20).

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Frommian social thought can aid the development a theoretical framework to understand

humanity's relationship with the rest of the biosphere that contains psychical, social, economic,

and ethical components in order to end our methodical "sacrifice of all life."

Revisiting and rethinking Fromm's social thought in the wake of environmental crises

and problems is important for three reasons. First, Fromm offers socio-environmental scholars a

systematic theoretical framework for analyzing societal-environmental interactions. As

discussed in the introduction, Catton and Dunlap (1978; 1980; Dunlap and Catton 1979) argued

that sociology, especially post-Second World War American sociology, had been erroneously

studying human beings as if the biophysical environment was totally unaffected by human

behavior or vice versa and called for a paradigm shift in sociology that would include humanity's

relationship with the natural environment (Catton and Dunlap 1980). I show that Fromm, like

Horkheimer, Adorno, and Marcuse, circumvented sociology's HEP and can be viewed as an

early endeavor to create a social theory capable of conceptualizing human-nature relations. In

other words, far from perpetuating sociology's HEP, Fromm is an early example of what

environmental sociological theorizing should strive for and how they should seek to achieve it.

Second, Fromm offered a radical, non-technical solution for our environmental crisis.

EMT maintains that technological innovation and reforms within contemporary social formations

will fundamentally improve society's relationship with nature (e.g. Mol 1997; Mol and

Sonnenfeld 2000; Mol 2010). The claims of EMT share commonalities with the notion of an

environmental Kuznets curve (Andreoni and Levinson 2001) and Inglehart's (1995) post-

materialist values theory. For EMT scholars, "environmental deterioration is conceived of as a

challenge for socio-technical and economic reform, rather than the inevitable consequence of the

current institutional structure" (Mol 2001:58). EMT optimism is founded on the premises that

the basic structures of modern societies are (1) flexible enough to be reformed to meet the goals

of environmental sustainability and (2) that technology created and utilized in modern capitalist

societies will and can be used to mitigate global environmental degradation (see Mol 1997).

However, a growing plethora of scholars argue that the inherent expansionary mechanisms of

capitalism make the goal of a "sustainable capitalism" unlikely (e.g. Schnaiberg 1980; Foster

1994; Mészáros 1995; O'Connor 1998). If EMT is deeply flawed on empirical and conceptual

grounds (York, Rosa, and Dietz 2010) and global environmental degradation is indeed rooted in

the basic processes of capitalism—a thesis Fromm (1976:xxiiiff) agreed with—, it is necessary to

begin developing an alternative normative vision, one that does not rely solely on technological

fixes and reforms. Fromm provided this alternative vision: a radical "biophilous" restructuring

of society and humankind's character.

Third, Fromm's work forces environmental scholars to rethink two systems of thought

often criticized in environmental literature: the humanistic and Judeo-Christian traditions.[41] His

novel interpretation of these worldviews indicate that two pillars of Western thought need not be

wholly abandoned in order to meaningfully theorize and progressively alter human-nature

relations. Many environmental scholars, including Horkheimer, Adorno, and Marcuse, have

argued Judeo-Christian theology (1) desacralized nature by ousting animism's nature worship,

(2) reduced matter to a subordinate status of spirit, (3) has taught the West that human beings are

the only divine beings on earth, and, as the only divine beings, (4) have the right to dominate and

rule over the rest of nature (for review, see Kinsley 1996:104-108). Most famously, in *Science*,

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[41] It should be noted that I do not uncritically accept Judeo-Christian theology, secularized or not, or humanism as unproblematic systems of thought. Both traditions have clear defects when examining their normative consequences for human-nature relations. I merely claim Fromm's interpretation and application of both traditions forces environmental scholars to rethink the constructive aspects of humanism and Judeo-Christian ideas and provides a healthy counterweight to the negative interpretations provided by Horkheimer, Adorno, and Marcuse. For more recent Marxist reassessments of Judeo-Christian thought, see Badiou (2003) and Žižek (e.g. 2000).

White (1967) argued that Judeo-Christianity is the foundation of the West's contemporary

unsustainable relationship with the environment, though provided an alternative, more

constructive approach by revitalizing Franciscan doctrine. Even Fromm's former colleagues

maintained that Judeo-Christian theology contained the seeds of the West's instrumental attitude

toward nature (Horkheimer 1947:63; Horkheimer and Adorno [1944] 1969:104ff). However,

Fromm's atheistic yet charitable interpretation of the Judeo-Christian thought suggests that those

concerned with the normative aspects of human-nature relations to reconsider this tradition—in

its more thoughtful manifestations—as potentially ethically sound. Like Judeo-Christian

thought, humanism is not a popular worldview in environmental scholarship. Many

environmental scholars argue humanism is, if not by definition, anthropocentric and at odds with

genuine environmentalist beliefs and goals and/or animal ethics (e.g. Ehrenfeld 1978; Eckersley

1992; Stanley 1995; Ophuls 1997; Haraway 1989; 2007; for critical review, see Hinchman

2004). Offering one of the many ideational theses concerning ecological unsustainability in his

influential *The Arrogance of Humanism* (1978), Ehrenfeld argued that humanistic ideology is the

root of ecological crises. By supposedly privileging "reason"—which, for Ehrenfeld, is nearly

synonymous with instrumental reason—over human "emotion," the humanistic tradition has

dichotomized the human being from the rest of nature, leading to our current unsustainable

relationship with the environment. Further, the supposed humanistic belief that humanity can

solve all problems through reason (via applied science and politics) is untenable and maintaining

such faith will worsen ecological crises.[42] Ladd (2003) has called for the humanistic sociological

tradition to reexamine and critically question its paradigmatic assumptions. Drawing from

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[42] Both Snoeyenbos (1981) and Hinchman (2004) have shown that criticisms of humanism by environmental scholars can be uninformed and tend to knock down straw men. However, examining Fromm's humanism in relation to environmental concern, whom both Snoeyenbos (1981) and Hinchman (2004) neglect, can further this discussion.

Heideggerian insights, Ladd argued that this "dark" side of humanism must be cast off if humanistic sociology is to mature in line with Catton and Dunlap's call for a NEP. Here, I show that Fromm provided a blueprint for this shift. Although Fromm unceasingly emphasized Pico's "dignity of man" and the importance of reason for creating a healthier relationship with nature, he did so without conceptualizing nature as a collection of consumables or matter devoid of value to be dominated. Without the arrogance and ecological-blinders of some past humanists, Fromm's humanistic vision for a better world demanded cooperative rather than exploitative human-nature relations.

I show that Fromm's system of thought was rooted in understanding humanity's effort to establish meaningful relations with the natural world and how socio-economic systems influence this endeavor. He argued that humankind must build a new, non-destructive relationship with the natural environment by fostering humankind's potentiality of biophilia and developed an ethical system (biophilic ethics) fitted to mend humanity's destructive relationship with nature. Fromm's social theory also casts a different, more affirmative light on the normative implications of Judeo-Christian thought and humanism for human-nature relations. Although he is currently and unfortunately unfashionable in academia today (McLaughlin 1998),[43] rethinking Erich Fromm's system of thought provides a new scheme for a comprehensive, systematic, and normative theory of human-nature relations.

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[43] Fromm's unpopularity deserves some comment. Although Fromm became popular in academia following *Escape from Freedom* (1941)—though not without criticisms (see McLaughlin 1996: 243f)—, he later fell out of favor for a variety of social reasons (McLaughlin 1998). Even Fromm's contribution to the development of critical theory, especially its synthesis of Freudian and Marxist ideas (Jay 1973: ch. 3; Held 1980: 111ff), has been evicted from the "revised history" of the Frankfurt School (McLaughlin 1999; c.f. Wiggershaus 1994:265f), partially due to Marcuse's (1955, Epilogue) condemnation of Fromm's Freudian "revisionism" (Rickert 1986). Even today, Fromm's sociological framework has few representatives, save Neil McLaughlin's notable investigations and extensions. One hopes Lawrence J. Friedman's (2013) recent thorough biography will evoke renewed interest in Fromm's ideas. My goal here is to simply draw attention to Fromm's forgotten ideas for the progress of environmental scholarship.

HUMANITY'S RELATION TO NATURE AS FROMM'S STARTING POINT

From Fromm's first major work (1941:34f) onwards, he argued there are two inherent and fixed

factors of human nature: the need for self-preservation and the need to solve an "existential

dichotomy" inherent in human nature. Fromm's notion of an existential dichotomy as the

"essence" that characterizes the structure of human beings (see Fromm 1941:36, 49f ; 1947:48f;

1955:29f; 1956:6f; 1962:170f, 189f; 1964a:116f; 1966:70f; 1968:62f; 1976:92, 122f) is

presupposed in his theory of biophilia, so it must be reviewed briefly. The concept of an

existential dichotomy was a unique reworking of the classical Western notion that human beings

are part of nature and yet "transcend" it, though a formulation free of human exemptionalism

(Fromm 1964a:117). As products of evolution, human beings are animals that are materially part

of, and dependent on, their surrounding natural environment and subject to natural laws which

they cannot change—i.e. humans are irrefutably part of the biosphere (Fromm 1955:30;

1973:252). By "transcending" nature, Fromm meant that with the development of self-

awareness and reason, human beings became "freaks of nature," as the "only thing in nature that

has awareness of itself" (Fromm 1994a:75).[44] The relatively large size and complexity of the

human brain, specifically the expansion of the neocortex, and decreased instinctive

determination served as a biological explanation for his philosophical anthropology (Fromm

1968:62; 1973:252f). With the increased capacity for reason and decreased instinctual

determination, human beings became conscious of their "separateness" from nature, as well as

their "lostness and weakness" (Fromm 1994a:75). This existential dichotomy creates a powerful

fear of isolation and meaninglessness: "unless he belonged somewhere, unless his life had some

meaning and direction, he would feel like a particle of dust and be overcome by his individual

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[44] This claim is somewhat problematic as some other animals have been shown to be self-aware, though addressing this limitation is outside the confines of this essay.

insignificance" (Fromm 1941:35-36). In other words, the tension that results from humankind's existential dichotomy is the reason for the menacing experiences of lostness, meaninglessness, and insignificance, fears that one can reasonably assume would not occur without the capacity for self-reflection, as described well by Albert Camus ([1942] 1955: 38): "[i]f I were a tree among trees, a cat among animals, this life would have a meaning, or rather this problem [the experience of meaninglessness] would not arise, for I should belong to this world."[45] This fear of aloneness demands the fulfillment of various "existential needs" (Fromm 1947:55f; 1955:33-66; 1973:259ff). Because this essay is concerned with Fromm's notion of biophilia, I focus on the existential need to restore unity (to establish "relatedness") "with the natural and human world outside" (Fromm 1973:262), which, for Fromm, is the central, organizing force for all of humanity's character-rooted passions, as humankind's existential dichotomy itself "result[s] in an imperative drive to restore a unity and equilibrium between himself and the rest of nature" (Fromm 1947:55). Indeed, Fromm (1955:31, emphasis removed) maintained that the need to "find ever-higher forms of unity with nature, his fellow men and himself" is the foundation for *all* forces of psychical motivation.

Fromm's philosophical anthropological conception of humankind's existential dichotomy was also formulated in a socio-historical framework (though one that is arguably too romantic). Different societies have "solved" humanity's separateness from nature, as well as meet survival needs, in radically different ways. Fromm claimed that hunter-gatherer societies overcame the dread produced from humankind's existential split by being ecologically and culturally "at one" with their surrounding environment, with rituals and norms that reinforced these "primary bonds" or "ties":

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[45] In many ways, Fromm's philosophical anthropology is in line with existentialist assumptions.   However, Fromm prescribed non-relativistic solutions to "solve" humankind's existential dread as well as formulated a social scientific framework to validate his claims, unlike thinkers such as Heidegger and Sartre.

the human race in its infancy still feels one with nature. The soil, the animals, the

plants are still man's world. He identifies himself with animals, and this is

expressed by the wearing of animal masks, by the worshiping of a totem animal

or animal gods. But the more the human race emerges from these primary bonds,

the more it separates itself from the natural world, the more intense becomes the

need to find new ways of escaping separateness (Fromm 1956:9).

But in agrarian-based societies too, cultural patterns reinforced material human-nature relations.

For Fromm, this could be seen in the matriarchal religions of early agrarian societies (1955:307)

and, later, in the cultural patterns and social structures of feudalism (1976:131). However, with

the furthering "emergence" of human society "from" nature, the norms and cultural patterns that

tied human beings to nature changed as well. In industrial societies, humankind's relatedness to

the natural world evolved into a destructive one, necessitating a cooperative relatedness to the

biophysical environment that can solve humankind's existential need for unity with nature.

THE CONCEPT OF BIOPHILIA: POTENTIALITY AND CHARACTER

The concept of biophilia has gained popularity in the last three decades in environmental

scholarship (Kellert and Wilson 1993) due to E. O. Wilson's book, *Biophilia* (1984). Wilson

(1984:1) defined biophilia as the "innate tendency to focus on life and lifelike processes," and,

later, "the innately emotional affiliation of human beings to other living organisms" (Wilson

1993:31). The *philia* in biophilia does not appear to literally mean "love" of life in Wilson's

conception. Instead, it is meant to denote the innate human need to emotionally affiliate with the

biophysical environment in various ways—"from attraction to aversion, from awe to

indifference, from peacefulness to fear-driven anxiety" (Wilson 1993:31). For Wilson, biophilia

is an evolutionarily acquired part of the human being's genotype (cf. Kellert 2009) through the process of gene-culture co-evolution, leading to an organism that naturally needs to emotionally affiliate with the biophysical environment (Wilson 1993). Two decades before Wilson's book, the concept of biophilia was developed by Fromm (1964a; 1973:373-74, 406-9). Excluding Orr's (1993), Van den Born et al.'s (2001:66), and Simaika and Samways (2010:903) brief recognitions of this fact, it has remained overlooked or disregarded entirely by environmental scholars—let alone sociologists. Rather than simply utilizing the same word in an entirely different way, Fromm's concept of biophilia has two general similarities with Wilson's. First, like Wilson, Fromm (1973:407) hypothesized that the human being "is biologically endowed with the capacity for biophilia." However, Fromm's speculative explanation of a biological basis for biophilia is different than Wilson's speculative explanation. Fromm's was openly based on Freud's ([1920] 1959:78) definition of the basic efforts of Eros (the life instinct[s]) "to combine organic substances into ever large unities":

> The most elementary form of this orientation [biophilia] is expressed in the tendency of all living organisms to live. … We observe this tendency to live in all living substance around us … Inasmuch as it is a tendency to *preserve* life, and to *fight* death, it represents only one aspect of the drive toward life. The other aspect is a more positive one: living substance has the tendency to integrate and to unite; it tends to fuse with different and opposite entities, and to grow in a structural way. Unification and integration growth are characteristic of all life processes, not only as far as cells are concerned, but also with regard to feeling and thinking (Fromm 1964a:45-46).

Another similarity is that both Wilson's and Fromm's notions of biophilia are important, normatively and theoretically, for comprehending human relations with the biophysical environment. For Wilson (1984:119ff; 1993), biophilia is a natural human force that can be utilized to combat biodiversity loss and foundational to his conservation ethic. Similarly, as discussed below, Fromm argued the development of biophilia is necessary for harmonizing society's relations with the biosphere.

Beyond these two general similarities, Fromm's notion of biophilia bears little resemblance to Wilson's hypothesis, namely because Fromm places a much greater emphasis on the social dynamics of biophilia, rather than the biological[46] and conceptualized biophilia as a *love* of life. For Fromm, a biophilous relatedness to the world was a "total orientation, an entire way of being" (Fromm 1964a:45), an active concern for living beings, not just a tendency to "focus" on nature or emotionally "affiliate" with it in various ways, like in Wilson's hypothesis. In short, Frommian biophilia is "the passionate love of life and of all that is alive; it is the wish to further growth, whether in a person, a plant, an idea, or a social group" (Fromm 1973:406). This includes a love for nature as well as a love for humanity (Fromm 1994b:101). For Fromm, love is "the experience of union with another person, with all men, and with nature, under the condition of retaining one's sense of integrity and independence" (Fromm 1955:37) and "*an active power in man*" which "makes him overcome the sense of isolation and separateness" (Fromm 1956:17). Fromm suggested that developing biophilia was the solution to both humanity's existential need for unity and its current destructive relationship with nature.

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[46] This is not to say that Fromm argued biophilia was simply a learned, behavioral trait. Van den Born et al. (2001) and Simaika and Samways (2010) both wrongly claim this. Although Fromm argued that biophilia can only develop in fitting social conditions, he also argued that the potential of biophilia is biologically rooted (this is what is meant by "primary potentiality").

Drawing from Aristotelian essentialism, Fromm argued that biophilia is a *potentiality* innate in human nature, meaning that biophilia will only flourish under conditions conducive to its growth. A potentiality does not necessarily actualize in unfitting conditions:

[t]o say that something exists "potentially" means not only that it will exist in the future but that this future existence is already prepared in the present. … [but the] actualization of a potentiality depends on the presence of certain conditions (Fromm 1947:219).

Fromm distinguished between two different types of potentialities: "a *primary potentiality* … is actualized if the proper conditions are present; … a *secondary potentiality* … is actualized if conditions are in contrast to existential needs" (Fromm 1947:219). Fromm (1964a:51) argued that biophilia was a primary potentiality, meaning that if social conditions exist that are conducive to the growth of human needs and capacities, biophilia will generally and "naturally" develop. However, if given social conditions stunt the unfolding of biophilia, alternative (secondary) potentialities will develop. Fromm argued that both primary and secondary potentialities actualize themselves in human *character* orientations and passions.

Fromm's (1973:255, emphasis removed) notion of character denotes "the relatively permanent system of all noninstinctual strivings which man relates himself to the human and natural world." Fromm maintained that the function of one's character was to "replace" the instinctual equipment that human beings lack. Like orthodox psychoanalysis, the notion of *character* is a central category of Fromm's system; however, Fromm revised Freudian characterology (personality theory) in two fundamental and interrelated ways. First, he argued that character is not simply formed through childhood libidinal development,[47] but is a dynamic

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[47] To be sure, childhood is a fundamental stage in the development of one's character, but Fromm argued that the parents' character orientations, as molded by the demands of society, are reproduced in the child via socialization,

process that is largely determined by the socio-economic demands of a given society.

Humanity's need for self-preservation requires that humanity's physiologically conditioned

"organic drives" (hunger, thirst, and sleep) be satisfied to stay alive. There are various ways in

which humanity's instinctual drives have been met throughout history, but all of these ways

involve *working*. Echoing the *German Ideology* (Marx and Engels [1846] 1977:42f), Fromm

argued that work performed to satisfy organic drives cannot be examined in abstraction, but only

in the concrete: the human being works in a particular mode of production as part of a particular

class. As an imperative, organic necessity, achieving self-preservation through work is "the

primary factor in determining his whole character structure" (Fromm 1941:33). But to

participate efficiently in the labor process to meet organic drives demands particular *types* of

character structures if society is to reproduce itself and function smoothly. The economic

system's influence on the formation of character structure is especially potent as "economic

factors are less easily changeable, they have a certain predominance in this interplay [between

sociological and ideological factors]" (Fromm 1955:78).

The second advancement in personality theory made by Fromm was the positing of

character as a *social* psychological category in his theorization of "social character" (Fromm

1941:304ff; 1947:85ff; 1955:76ff; 1962:76ff; 1965a; 1976:199f; for empirical application, see

Fromm and Maccoby 1970; for early formulations, see Fromm [1930] 1963; [1932] 1970a;

Fromm [1932] 1970b). Addressing the problem in Marxist theory as to *how*, exactly, material

conditions mold ideologies, Fromm offered his concept of social character as a "connection" or

"intermediary" between the two broad categories. Fromm believed that if the many minute,

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not necessarily through psychosexual developmental processes. "The family … may be considered to be the *psychic agency of society*, the institutions which has the function of transmitting the requirements of society to the growing child. … Since the character of most parents is an expression of the social character, they transmit in this way the essential features of the socially desirable character structure to the child" (Fromm 1955:79) (for a similar though more empirical and nuanced view, see Kohn 1963).

individual character traits of a given society or group are bracketed, it is possible to form ideal

typical characterological categories that "are roughly representative for various groups of

individuals" (Fromm 1962:82; for Fromm's early characterological categories, see 1947:70-122).

For Fromm (1962:83, emphasis removed), the social character is "the nucleus of the character

structure which is shared by most members of the same culture." The relationship between

material, objective conditions and the molding of social character is summarized well here:

> [e]ach society is structuralized and operates in certain ways which are
>
> necessitated by a number of objective conditions. … The members of the society
>
> and/or the various classes or status groups within it have to behave in such a way
>
> as to be able to function in the sense required by the social system. It is the
>
> function of the social character to shape the energies of the members of society in
>
> such a way that their behavior is not a matter of conscious decision as to whether
>
> or not to follow the social pattern, but one of *wanting to act as they have to act …*
>
> it is the social character's function *to mold and channel human energy within a*
>
> *given society for the purpose of the continued functioning of this society* (Fromm
>
> 1962:84-85).

Along with reproducing socio-economic conditions, social character provides group cohesion, a

frame of reference, and solidarity. After a social character orientation develops, ideas emerge

from this structure and individuals and groups become "naturally" attracted to or repulsed by

certain ideologies (the totality of Fromm's complex social theory and assumptions about human

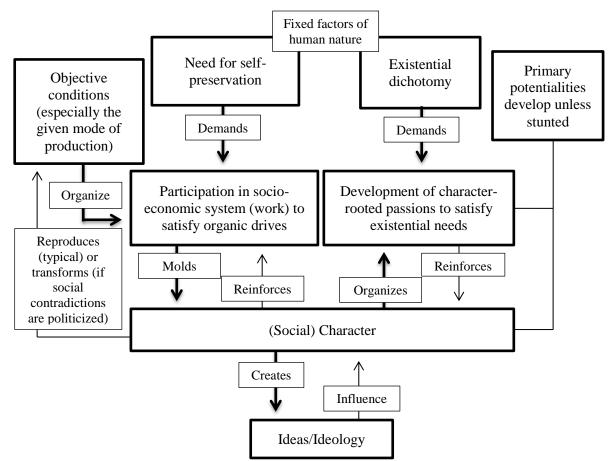nature described thus far are depicted in Figure 1).

Figure 1 note: Bolded arrows are meant to signify the dominant or primary causal variable in the given interaction. E.g., the social character is the principle cause of ideological formation, though ideas influence the structure of social character, whether in its perpetuation or dissolution. By nature, conceptual models are static representations and poorly suited to accurately symbolize dynamic relations, thus Fromm's system of thought inaccurately appears deterministic. The model is based on Fromm's (1962:94) historical materialist model, but is significantly expanded to include all of the major analytical categories that organized Fromm's thought from *Escape from Freedom* on. In relations to biophilia, this model helps systematically depict (a) why biophilia is a possibility for humans (existential dichotomy/primary potentialities); (b) how biophilia is manifested (social character/character-rooted passions); (c) what needs to be altered for biophilia to become the social character structure (objective conditions); and (d) how to alter objective conditions in line with the ideas of security, justice, and freedom (politicize contradictions).

For Fromm, *the potentiality of biophilia actualizes itself in the biophilous character structure*.[48] The biophilious person "who fully loves life is attracted by the process of life and growth in all spheres" (Fromm 1964a:47). As a character orientation, biophilia is a total way of being related to the world. The biophilous person is attracted to ideas that promote the defense and growth of living structures (including nature), performs actions conducive to the defense and growth of living structures (including nature), and is emotionally attached to and invested in both in human and nonhuman forms. For Fromm (1964a:45), the biophilous orientation "is manifested in a person's bodily processes, in his emotions, in his thoughts, in his gestures; the biophilous orientation expresses itself in the whole man."

Because the love of nature as a way of being related to the world may sound romantic, utopian, or even like New Age pseudo-metaphysics, we must ask what the unfolding of biophilia would really mean for human-nature relations. Perhaps the only sociologist since Simmel ([1921] 1971) to do so, Fromm made love (and its distortions) a focal variable for properly theorizing social interaction. In his highly popular *The Art of Loving* (1956), Fromm outlined four active elements of love: care, responsibility, respect, and knowledge. For Fromm, care directly applied to human-nature relations as well to human-human relations. Care "is not different even with the love for animals or flowers. If a woman told us that she loved flowers, and we saw that she forgot to water them, we would not believe in her 'love' for flowers. *Love is the active concern for the life and the growth of that which we love*" (Fromm 1956:22). Showing care for nature is an *active* process. It requires time and commitment to aiding the object of reverence—in this case, nature—in its growth and defending it from destruction. Unfortunately, Fromm did not expand the rest of his typology (responsibility, respect, and knowledge) to

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[48] Fromm's notion of a biophilous orientation is almost synonymous with his "productive orientation" (Fromm 1964:57; see 1947:89ff), though the new focus on nonhuman nature is unique when compared to his earlier formulation.

human-nature relations, but doing so is internally consistent with his social theory and normative vision. As he stated in *Man for Himself,* "[a]lthough the objects of love differ and consequently the intensity and quality of love itself differ, certain basic elements may be said to be characteristic of all forms of productive love" (Fromm 1947:104). Closely related to care for nature, responsibility implies the activity of voluntarily "responding" to and meeting another's needs, thus, feeling responsible for nature means actively striving to meet the needs of nature. For Fromm, genuine respect is not based on fear, but rather, the ability to recognize another's uniqueness and allow them to develop their potentialities independent from coercion. In negative terms, respect is an "absence of exploitation"—not using another as a means to an end (Fromm 1956:23). In relation to the environment, this means recognizing the potentialities in living beings and allowing them to actualize free from domination. The fourth active element of love is domination-free knowledge (cf. Scheler's similar conception in Vacek 1982:164). For Fromm, like the "scientist that seeks truth by means of dismembering life" (Fromm 1976:5), exercising ownership and control over an object or person is one way to gain knowledge:

> [i]n children we often see this path to knowledge quite overtly. The child takes
>
> something apart, breaks it up in order to know it; or it takes an animal apart;
>
> cruelly tears of the wings of a butterfly in order to know it (Fromm 1956:25).

But Fromm felt there was another path to knowing: "[l]ove is active penetration of the other person, in which my desire to know is stilled by union" (Fromm 1956:25). For human-nature relations, this means developing a domination-free method for knowledge acquisition of the natural world which is motivated by love and desire for reunion rather than mastery or abstract curiosity.

To summarize, Frommian love of nature means: (1) an active concern for nature's growth and prosperity, (2) responding to and meeting its needs, (3) respecting nature's independence from human interests, and (4) knowing nature without dominating it. However, as a Marxist sociologist, Fromm clearly understood that merely moralizing and listing ethical maxims for how humans ought to live was limited—one must fully comprehend the social relations and processes that stand in the way of a rational society. What would need to take place for biophilia to become the *social character*, rather than a character structure of atypical individuals? For Fromm (1964a:52), three social conditions must precede the unfolding of biophilia:

1) *Security*: Society must develop a socio-economic system capable of meeting basic human needs. Under current conditions, the vital needs of every human being *could* be met but are not. Fromm felt that the absence of economic scarcity is a prerequisite for any "dignified life."

2) *Justice*: Injustice takes place when any person or group is used as a means for another person's or group's ends. Justice must precede biophilia as exploitation distorts and stunts the development of primary potentialities. For Fromm, true justice presupposed the end of class hierarchies.

3) *Freedom*: The "freedom to" (see Fromm 1941) develop essential human capacities and participate in society in a meaningful, non-alienating, and productive way are essential for the unfolding of biophilia. For Fromm, modern societies produced automatons unable and unwilling to develop their humanity freely and responsibly, which excludes the possibility of developing a biophilous character structure. For Fromm, the positive freedom to become fully human would simultaneously develop the potentiality of biophilia.

What can be said about these prerequisites when compared to contemporary social reality? As explained above, Fromm's social theory argued that a given socio-economic system was the primary variable in the creation of a given social character. Security, justice, and freedom would require a substantively rational social formation (discussed below). Under current social conditions, Fromm documented an antagonistic alternative to biophilia developing in industrial societies, which he termed "necrophilous" (see Fromm 1973; 1976).

CONFRONTING A "NECROPHILOUS" SOCIETY

Fromm argued that the basic processes and goals of industrial capitalism (as well as the socialist states of the time) of unlimited technical progress, consumption, and production had failed for a variety of reasons. One of the chief reasons for the failure of what he termed "The Great Promise of Unlimited Progress" was due to the reality of natural limits. Along with the possibility of nuclear war, he claimed "[t]echnical progress itself has created ecological dangers … which may put an end to all civilization and possibly to all life" (Fromm 1976:xxiv). In this last great treatise, *To Have or to Be?* (1976), Fromm explored many of the works that helped establish modern environmentalism, including the Club of Rome commissioned *The Limits to Growth* (Meadows et al. 1972) and *Mankind at the Turning Point* (Mesarovic and Eduard 1974). In these reports, Fromm found an ecological footing for what he had maintained since the 1940s: humankind must develop a new and non-destructive unity with nature to solve humankind's existential dichotomy. The recent reports merely expressed the fact that failing to do so may be ecologically disastrous:

[b]eing "freaks of nature" who by the very conditions of our existence are within

nature and by the gift of our reason transcend it, we have tried to solve our

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existential problem by giving up the Messianic vision of harmony between

humankind and nature by conquering nature, by transforming it to our own

purposes until the conquest has become more and more equivalent to destruction.

Our spirit of conquest and hostility has blinded us to the facts that natural

resources have their limits and can eventually be exhausted, and that nature will

fight back against human rapaciousness (Fromm 1976: xxix-xxx).

For Fromm, the failure of the reports commissioned by the Club of Rome were their abstract and

depersonalizing methodology and, connected to this, the exclusion of political and social factors

in conceptualizing the creation and solution to ecological degradation. Fromm agreed with both

reports that humanity must develop a new ethic toward nature, but "this demand is so contrary to

their [Club of Rome authors'] philosophical premises" (Fromm 1976:xxxi). That is, without the

social and political variables to guide the reports, which for Fromm meant questioning the basic

values *and* structures of industrial societies (Fromm 1976:xxxii-xxxiii), it was unsatisfactory and

naïve to argue for a new ethic toward nature. For Fromm:

> [r]ight living is no longer only the fulfillment of an ethical or religious demand.
> For the first time in history the *physical survival of the human race depends on a*
> *radical change of the human heart*. However, a change of the human heart is
> possible only to the extent that drastic economic and social changes occur that
> give the human heart the chance for change and the courage and the vision to
> achieve it (Fromm 1976:xxxi).

Yet he did not see the social and political prerequisites necessary for a biophilous "change of

heart" in contemporary society. Fromm saw an opposing trend developing in contemporary

society: that of a "necrophlious" social character and social system.

Necrophilia, a term usually used to describe sexual attraction to and/or relations with corpses, was used by Fromm (1973:369, emphasis removed) more broadly to describe "the passionate attraction to all that is dead, decayed, putrid, sickly; it is the passion to transform that which is alive into something unalive; to destroy for the sake of destruction; the exclusive interest in all that is purely mechanical. It is the passion to tear apart living structures." Struck by the extremity of this definition (1973:387), Fromm claimed that less-acute necrophilous tendencies could be seen in today's "cybernetic humanity," distinguished by the following characteristics: "intellectualization [i.e. a lack of feeling], quantification, abstractification, bureaucratization, and reification" (Fromm 1964:59).[49] All of these characteristics correspond to industrial society's preoccupation with *technique* (i.e. focus on means and methodology at the expense of formulating substantive end goals) and the *mechanical*:

> [t]he tendency to install technical progress as the highest value is linked up …
>
> with a deep emotional attachment to the mechanical, to all that is not alive, to all
>
> that is man-made. This attraction to the non-alive, which is in its more extreme
>
> form is an attraction to death and decay (necrophilia), leads even in its less
>
> drastic form to indifference toward life (Fromm 1968:44).

Although necrophilia was formulated as an individual and social psychological category, Fromm (1973:387) spoke of technocratic, consumer capitalism as a *necrophilous society*. That is, necrophilia was used by Fromm to describe the contemporary social character (attraction to the

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[49] Closely related to Fromm's concept of a "cybernetic humanity" is his more popular notion of the "marketing character." The marketing orientated person experiences life as a commodity, even one's own capacities and needs, is interested in consumption and fun, functions efficiently in corporate bureaucracies, and is interested in pleasing others. "What is the 'social character' suited to twentieth-century Capitalism? It needs men who co-operate smoothly in large groups; who want to consume more and more, and whose tastes are standardized an can be easily influenced and anticipated. It needs men who feel free and independent, not subject to any authority, or principle, or conscience—yet willing to be commanded, to do what is expected, to fit into the social machine without friction" (Fromm 1955:102).

non-alive) as well as the structure and processes of modern social systems: "the lifeless world of total technicalization is only another form of the world of death and decay" (Fromm 1973:390). Modern society's destructiveness not only manifested itself in ecological crises but, more importantly, society's inability to do anything about them:

> [w]e cease to be the masters of technique and become instead its slaves—and technique, once a vital element of creation, shows its other face as the goddess of destruction … While consciously still hanging onto the hope for a better future, cybernetic humanity represses the fact that they have become worshippers of the goddess of destruction. This thesis has many kinds of proof, but none more compelling than these two: that the great … powers continue to build nuclear weapons … and that virtually nothing is done to end the danger of ecological catastrophe (Fromm 1976:138).

Modern societies are environmentally destructive and its leaders were prepared to continue in the name of progress. That is, similar to his former colleagues (e.g. Horkheimer 1947; Horkheimer and Adorno [1944] 1969), Fromm reasoned that the severing and inversion of means and ends had created a social world that blindly masters and dominates the natural world as an end in itself (cf. Fromm 1973:389).

Fromm did not one-sidedly theorize that the causes of environmental degradation were exclusively structural in nature or a consequence of economic elite interests. In addition to these primary explanations, Fromm also argued the contemporary social character channels human interest and energy toward the non-alive and the mechanical at the expense of developing biophilia. This assertion is founded on Fromm's Freudo-Marxist theoretical framework, as explained above (see Figure 1), which posits that the prominent character structure of a given

society is mostly determined by the socio-economic system's reproductive demands. Social systems maintained through environmental destruction necessitate societal members who are not biophiles, but, instead, are attracted to society's destructive "progress," whom unconsciously or consciously wish to maintain it. Indeed, Fromm (1973:381) considered "the stifling of his focal interest in people, nature, and living structures together with the increasing attraction of mechanical, nonalive artifacts" to be "the simplest and most obvious characteristics of contemporary industrial human." The modern marketing character orientation (Fromm 1947:75ff), who experiences the world and their self as a collection of consumables, has little interest in the natural world. For Fromm (1973:381), the love of cars, gadgets, and other commodities are necrophilous when used as a "substitute" or "replacement" for interest in living structures. The abstraction and quantification of life is wrapped up in with the attraction to the mechanical and preoccupation with technique and technical progress:

> [l]ife can be experienced only in its individual manifestations, in the individual person as well as in a bird or a flower. … [T]here is no life in abstraction. Our approach to life today becomes increasingly mechanical. … People love mechanical gadgets more than living beings (Fromm 1964:57).

Of course Fromm knew that the capacity for abstraction and conceptualization were necessary for any modern society or individual to function sanely. However, like Ernst Bloch ([1955] 1986: 666f), he was concerned that the way social systems and individual human beings relate to the natural environment was in a purely technical, lifeless way—as if living entities were merely quantifiable ideas. For Fromm (1955:106), the human capacity for abstraction had become distorted and strained due to the imperatives of capital:

the concrete reality of people and things to which we can relate with the reality of

our own person, is replaced … by ghosts that embody different quantities …

When one speaks of the "three-million-dollar bridge," one is not primarily

concerned with its usefulness or beauty …, but one speaks of it as of a

commodity, the main quality of which is its exchange value.

He asserted that this loss of concreteness could be observed when comparing past human-nature

relations to those of modern societies, especially the changes that have taken place in the last

century:[50]

until the end of the twentieth century, nature and society had not lost their

concreteness and definiteness. Man's natural and social world was still

manageable, still had definite contours. … [T]his definiteness and concreteness is

in the process of being lost (Fromm 1955:110).

In other words, Fromm argued that past societies, although many quite socially destructive, were

at least able to secure natural resources without causing irreparable environmental damage (e.g.

Fromm 1955:307; 1956:9; 1976:131), with some notable exceptions. What makes modern

societies unique in this regard is their ability to appropriate the biophysical world as if it were

amorphous and quantifiable entity with technical precision at an unprecedented scale, yet unable

to take measures to mitigate the environmental harm caused in the process. The latter failure,

Fromm argued, is an inseparable consequence of the former processes. Yet he argued that the

development of an ecologically destructive society simultaneously created a counter-movement

of biophiles. The birth of modern environmentalism was embraced by Fromm as a garrison of

hope in a world of destructiveness and his *To Have or to Be?*(1976) was influential in the

[50] Fromm does not explain what social or technological changes occurred during the beginning of the twenty-first century in particular—as opposed to other modern historical periods—to justify identifying this era as the beginning of a loss of concreteness between human-nature relations.

development of the Green movement in West Germany (Burston 1991:5). In the early 1970s,

Fromm (1973:397, emphasis added) wrote that "there is *hope* in the rising protest against

pollution and war," in those "who protest against the deadening of life." Although Fromm

remained vehemently critical of late capitalism's irrationality and destructiveness, he often

defended the concept of hope (1966:121f; 1968:6ff, 1973: 482f), especially hope for building a

new unity with nature—a temperament rooted in his secularized interpretation of Judeo-Christian

thought.

THE SECULARIZED JUDEO-CHRISTIAN UNDERPINNINGS

As stated earlier, Judeo-Christian thought is often criticized in environmental scholarship.

Undeniably, a legitimization of nature domination and anthropocentrism can be found in the first

two chapters of Genesis. However, Fromm's reading of the Bible and Talmud shined a new

affirmative light on the relationship between Judeo-Christianity and nature. In relation to nature,

Fromm's reading of the Old Testament expressed the same theoretical presumptions as his own

thought. In particular, for Fromm, humankind's (1) emergence from nature, (2) existential

dichotomy, and (3) striving to reunite with nature were expressed in the myth of the fall, and the

solution to the antagonistic relationship between humanity and nature was expressed in the

messianic concept of peace (*shalom*). Fromm (1962:5) revealed that his youthful desires for a

better world resulted from reading Isaiah's, Amos', and Hosea's utopian visions and, later, he

studied the Talmud with Salman Rabinkow and other Jewish scholars as a student (Funk

1999:53-55; cf. Jay1973:33; for general discussion of Judaism's influence on Fromm, see

Schimmel 2009). But one must not forget that Fromm argued prophetic scholars were only part

of a tradition of non-regressive theory. The Biblical scholars developed a proto-humanist,

progressive school of thought, which "recognized that he [Man] could solve his problem only by moving forward, by developing fully his reason and his love, by becoming fully human and thus finding a new harmony with man and nature, feeling again at home in the world" (Fromm 1962:171; cf. 1968:69f). The Renaissance and Enlightenment expressed similar goals,[51] though restated in nontheistic ways, culminating in a thinker whom Fromm considered the exemplar of this progressive tradition: Karl Marx (Fromm 1962:172). It is necessary to analyze Judeo-Christian thought's influence on Fromm's notion of biophilia because the lines between Fromm's interpretation of the Bible and Talmud and his normative mission to reunite humanity and nature are often blurred. Most importantly, Fromm's interpretation of the messianic concept of *peace* points to what the unfolding of *biophilia* would resemble.

For Fromm, the story of the fall did not imply an "original sin" that eternally corrupted human nature, a belief engrained in Western consciousness since St. Augustine ([426] 1972: Book XIII). Instead, eating from the tree of knowledge was symbolic of humanity's self-awareness and knowledge of their separateness from nature—in short, one of the many myths that depict humankind's existential dichotomy:

> Adam and Eve at the beginning of their evolution are bound to blood and soil;
> they are still "blind." But "their eyes are opened" after they acquire the
> knowledge of good and evil. With this knowledge the original harmony with
> nature is broken. Man begins the process of individuation and cuts his ties with
> nature. In fact, he and nature become enemies, not to be reconciled until man has
> become fully human. With this first step of severing the ties between man and
> nature, history—and alienation—begins (Fromm 1966:57).

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[51] Unlike his former colleagues (e.g. Horkheimer and Adorno 1969), Fromm never critically investigated the Enlightenment's thought in relation to humanity's instrumental view of nature.

For Fromm, the fall is symbolic of humankind's existential need to reunite with nature (1966:70). This can be done in two ways: through the development of humanity's primary potentialities (e.g. biophilia) or the endeavor to "return" to nature, to regress to a pre-rational, primordial state of, what thinkers like Shestov ([1937] 1966) considered, "freedom." Attempting to regress to a symbiotic bond with nature is not only fleeting, it also cripples the development of human capacities:

> there are a number of limited and ascertainable answers to this question of
> existence [how to achieve unity with the outside world] …; yet there are basically
> only two categories of answers. In one, man attempts to find again harmony with
> nature by regression to a prehuman form of existence, eliminating his specifically
> human qualities of reason and love [cf. Fromm 1973:263; 1994a:75]. In the other,
> his goal is the full development of his human powers until he reaches a new
> harmony with his fellow man and with nature (Fromm 1962:189-90).

Far from corrupting human nature, humanity's eviction from Paradise and the addition of critical reason to animal consciousness provides a chance to, at once, become fully human and reconcile human-nature relations. In Fromm's near-teleological framework (1) humankind's separation from nature was seen as a prerequisite for the full development of humankind and (2) the full development of humankind was considered a necessary prerequisite for reconciliation with nature: "Man has to experience himself as a stranger in the world, as estranged from himself and from nature, in order to be able to become one again with himself, with his fellow man, and with nature" (Fromm [1960] 1963:184; for a secularized statement, see 1962:60). That is, only by being evicted from "Paradise" (a primordial oneness with nature) can human beings become

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human, developing their capacities of love and reason to reunite with nature as fully developed beings.

The passionate longing to reunite with nature after the fall (Fromm's existential need for unity) is the precondition for the Biblical concept of the messianic time. The messianic time is a utopian vision inherent in any progressive thought, though called by many different names, such as socialism (Fromm 1962:60-61): a time without war, free from manifestations of clannishness, and a new and fully humanized unity with other humans and nature:

> [o]nly by going through the process of alienation can man overcome it and
>
> achieve a new harmony. This new harmony, the new oneness with man and
>
> nature is called in the prophetic and rabbinic literature "the end of the days," or
>
> "the messianic time." … The messianic time is the historical answer to the
>
> existence of man. He can destroy himself or advance toward the realization of the
>
> new harmony. Messianism is not accidental to man's existence but the inherent,
>
> logical answer to it—the alternative to man's self-destruction (Fromm 1966:71).

In other words, the solution to humankind's existential dichotomy is already inbuilt: to progress. Only by moving forward and developing essential human powers such as biophilia—by becoming fully human—can humanity reach a non-destructive *re*union with nature; a new state of *harmony* between nature and a fully developed and biophilous human being (Fromm [1960] 1963:187; 1966:98). Although it is difficult to conceive of harmonious human-nature relations in the wake of contemporary society's destructiveness, Fromm maintained that the seeds of the messianic time can be viewed in the Sabbath's concept of rest, as "*a state of peace between man and nature*. Man must leave nature untouched, not change it in any way, either by building or by destroying anything" (Fromm 1966:154). If the Sabbath is the messianic time in germinal form,

the Biblical concept of peace (*shalom*) embodies the full unfolding of harmonious human-nature

relations. For Fromm, the Biblical concept of peace exemplifies what the messianic time would

mean between human beings and nature (expressed most clearly in Isaiah 11):

> [t]he prophetic concept of peace transcends the realm of human relations; the new
>
> harmony is also one between man and nature. Peace between man and nature is
>
> *harmony* between man and nature. Man and nature are no longer split, man is not
>
> threatened by nature and determined to dominate it: he becomes natural, and
>
> nature becomes human. He and nature cease to be opponents and become one.
>
> Man is at home in the natural world, and nature becomes part of the human world.
>
> This is peace in the prophetic sense (Fromm [1960] 1963:188).

Peace is more than the absence of war and destructiveness: it is an affirmative state of harmony

between humankind and nature; a state in which humanity will cease the instrumental

domination of nature in favor of cooperation. However, Fromm knew that a super-human

messiah could not bring about such a condition. This is up to humanity's formation of a

biophilous social character.

THE AMBIGUITIES OF HUMANISM

Like the Judeo-Christian tradition, humanism is often criticized in environmental scholarship

(see Introduction). Yet Fromm offered a unique formulation of humanism that was neither

arrogantly anthropocentric nor ecologically-blind and that can address some of the limitations of

humanistic assumptions pointed out by environmental scholars. Although some of Fromm's

earlier work reproduces certain flaws of the humanistic tradition (especially its

anthropocentrism), his thought developed significantly from the mid-1960s on. As shown,

Fromm continued humanism's goal of human perfection, but he was clear this goal can only be actualized through cooperative rather than exploitative relations with nature. Indeed, Fromm argued the quest to dominate nature contradicts the quest for human perfection and, like Horkheimer, Adorno, and Marcuse, maintained that the latter can progress only after the end of the former.

For Fromm, humanism represented a "faith," an experience, and an ethic (for overviews, see Fromm 1964b;1965b). Fromm's (1966:14-15) humanism can be summarized as follows: "a global philosophy which emphasizes [faith] the oneness of the human race [experience], the capacity of man to develop his own powers and to arrive at inner harmony and at the establishment of a peaceful world [ethic]." Humanism as faith is a belief in the ability of humanity to advance toward perfection by developing the powers of love and reason and a conviction that the goal of human perfection is good in itself (see below). However, "[t]his perfectibility means that man *can* reach his goal, but it does not mean that he *must* reach it" (Fromm 1962:192). In other words, "faith" is not a dogmatic concept. Fromm, who spent most of his career examining human evil and destructiveness, argued that faith in humanity was derived from an inner experience, not by observing humanity as it manifests itself in different historical epochs. Faith, for Fromm, was a "certainty based on the *inner experience* of the goal, even though it has not yet been reached, and no proof exists that it ever will be" (Fromm 1966:124). This inner experience is expressed in humanity's existential dichotomy and a "social" unconscious.

As an experience, Fromm's humanism, echoing Terence and Goethe, declared "that I carry within myself all of humanity" (Fromm 1994a:77). For Fromm, this essential intersubjective experience shared by all of humanity is our existential dichotomy. Humanism as

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an experience is the realization that all of humanity is, essentially, the same as your self: "[w]hat all men have in common are their organic drives … and their existential needs" (Fromm 1973:255). All individual manifestations of humanity—the sinner and the saint, the reactionary and the radical, Himmler and Tolstoy, etc.—derive from the same origin: *how* the human being solves their existential split, specifically how existential needs for relatedness and union are realized. However, the *degree* of awareness of humanity's oneness, Fromm thought, is stunted by societal repression. Following Freud, Fromm maintained that the full experience of humanity can be experienced by becoming conscious of unconscious drives, desires, and wishes (see Fromm 1962:139; 1964a:93; 1973:257). Yet Fromm's humanism transcends the limits of a common human experience. He argued that humanity carried the whole of nature within its existence and maintained that humankind has the ability to sense "one's oneness with *all* life" (Fromm 1976:156). In one of his more lyrical and speculative moments, Fromm stated that the universal in humanity's unconsciousness also:

> represents *the plant in him, the animal in him*, the spirit in him; it represents his
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> past, down to the dawn of human existence, and it represents his future up to the
>
> day when man will have become fully human, and when nature will be humanized
>
> as man will be "naturalized" (Fromm 1962:139, emphasis added).

Thus, far from an anthropocentric experience, *Fromm's humanism is an experience of solidarity with all of life*. Further, one can find the solution to humankind's existential dichotomy within one's self: *to progress* and create a new harmony with nature. For Fromm, the capacity to share a common experience with life inevitably contained a normative element, as expressed in his humanistic and biophilic ethics.

Like his former colleagues (e.g. Horkheimer 1947), Fromm was concerned with the expulsion of moral judgment and aesthetic reflection from rationality. However, unlike the other early critical theorists, Fromm, drawing from virtue ethics, explicitly stated what needed to be done to overcome modernity's moral relativism: "in order to know what is good or bad for man one has to know the nature of man" (Fromm 1947:16). Fromm argued that by studying humanity's inherent needs, one could develop an objectively-valid, eudaimonistic ethical system that sought to proliferate primary potentialities (good) and deter their distortion (bad). Following Aristotle and Spinoza (Fromm 1947:34ff), Fromm argued that what is good for human beings is the development and actualization of the specific, primary potentialities characteristic of human beings. For Fromm, these potentialities were reason (thought), love (emotion), and "productiveness" (action) (the latter being defined as "man's ability to use his powers and to realize the potentialities inherent in him") (Fromm 1947:54, 91f). In short, goodness is becoming and perfecting what one potentially is. However, Fromm's early inquiry into ethics, specifically in *Man for Himself* (1947), is mostly devoid of interest in ethical aspects of humanity's relationship with nature. Indeed, it is openly "anthropocentric" (Fromm 1947:22). However, after the publication of *The Heart of Man* (1964a), Fromm's ethical thought progressed considerably from an environmental perspective. One can see the expansion of Fromm's ethical thought to include the whole of nature—rather than just humanity—when comparing the following moral maxims from *Man for Himself* (1947) and *The Anatomy of Human Destructiveness* (1973), respectively.

  a. *Humanistic ethics*: "'[G]ood' is what is good for man and 'evil' is what is detrimental to man" (Fromm 1947:22).

b. *Biophilic ethics*: "Good is all that serves life; evil is all that serves death. Good is reverence for life, all that enhances life, growth, unfolding. Evil is all that stifles life, narrows it down, cuts it into pieces" (Fromm 1973:406; cf. 1964a:47).

Although in some respects similar, Fromm's turn from the service of humanity to a broader service of *life* shows his progress as a scholar that is important for normative theorizing. Further, Fromm's use of the phrase "reverence for life" is an open alliance with Schweitzer's ([1923] 1960:307ff) ethics and his definitions of good and evil are almost identical with Schweitzer's ([1923] 1960:79) (for the importance of Schweitzer for environmental and animal ethics, see Free 1988). Fromm's theory of biophilia, in many ways, is a historical materialist completion of Schweitzer's ethics of reverence for life.

But how can humans adhere to biophilic ethics in a destructive society? For Fromm, the full realization of biophilia could only take place in a society that submits the economic system to meet the needs of *life*, rather than subjecting *life* to the needs of the economy. If we take Fromm's framework seriously, only when the material conditions of society change can the social character follow. More applicably, only when a social formation develops that maintains systemic processes to ensure ecological sustainability and collectively sets goals to "appropriate" the biophysical environment in substantively rational ways can we expect a biophilious social character to flourish. Morality is not a free-floating, contemplative activity—ethical life and thought can only extensively materialize in a society that is conducive to moral growth (Fromm 1965b:viii). Contradictions that threaten the reproduction of society, such as our current ecological crisis, open up opportunities for the development of a new social formation and social character, though the contradictions must be politicized (Fromm [1932] 1970a:161). Fromm argued that only a "humanistic communitarian socialism" (1955:315) would provide the

necessary prerequisites for the realization of a fully developed human. In relation to human-nature relations, Fromm's (1976:145) humanistic socialist political program was, what we would now call, a form of "ecosocialism," contending that "a new relation must be established between people and nature, one of cooperation not of exploitation." Much of Fromm's thought concerning human-nature relations—humankind's existential dichotomy, the need to reunite with nature, the Judeo-Christian and humanistic influences—is synthesized when comparing Marx's vision for socialism with the messianic time. A true realization of Marx's vision of socialism means reconciliation with nature:

> [i]n Paradise man still is one with nature, but not yet aware of himself as separate from nature and his fellowman. By his act of disobedience man acquires self-awareness, the world becomes estranged from him. … Socialism, in Marx's sense, can only come, once man has cut off all primary bonds, when he has become completely alienated and thus is able to reunite himself with men and nature without sacrificing his integrity and individuality (Fromm 1962:60-61).

As Marxists have argued for a century and a half, Fromm (1961:63) maintained that a "New Man" would develop with a new, substantively rational society: "[t]he unalienated man, who is the goal of socialism …, is the man who does not 'dominate' nature, but who becomes one with it, who is alive and responsive toward objects, so that objects come to life for him [cf. Marx (1844) 1964:137]." For Fromm, this new humanity would be capable of "[s]ensing one's oneness with all life, hence giving up the aim of conquering nature, subduing it, exploiting it, raping it, destroying it, but trying, rather, to understand and cooperate with nature" (Fromm 1976:156). Indeed, this may be the most important task of humanity today.

CONCLUSIONS

Although Erich Fromm's social theory has fallen out of favor, it is important for social scientists interested in human-nature relations to rethink Fromm's unique approach to critical theory. Humankind's relationship with nature was a central organizing theme in Fromm's science of humanity and he theorized human beings as an embodied part of nature. The elemental underpinnings of Erich Fromm's social thought hold that human beings must (a) interact with the environment to achieve self-preservation ("work," broadly defined) and (b) solve an "existential dichotomy" at an individual and social level. He argued humankind could solve their "existential dichotomy" as well as meet survival needs in an ecologically sound way by fostering and perfecting the potentiality of biophilia—a thorough love of life in its various manifestations. However, in Fromm's view, modern societies have stunted the development of biophilia and fashioned an antagonistic tendency in humanity's character structure and social systems, an affinity for the non-alive and mechanical. He argued environmental destruction was directly connected to these outgrowths of, what he termed, "necrophilia." For Fromm, biophilia will not become the predominant character structure (*social character*) until a substantively rational society develops, capable of meeting three needs Fromm argued were necessary for becoming fully human: security, justice, and freedom and, thus, offered a solution to our ecological crisis that is not dependent on technological fixes and market reformism.

Fromm's normative vision is rooted in humanism and Talmudic studies and, thus, forces environmental scholars to rethink Judeo-Christian thought and humanism, two traditions often criticized in environmental literature. Both frameworks are frequently interpreted as anti-ecological paradigms that radically separate human beings from the rest of nature and legitimize the latter's domination by the former. Fromm retained humanism's quest for human perfection

and the Old Testament's messianic vision for peace, but casts off the more anthropocentric and arrogant aspects of the Western tradition. His humanistic and messianic vision for a better world demanded cooperative rather than exploitative human-nature relations. In summary, revisiting Erich Fromm's works provides a developable theoretical foundation for a humanistic sociology that contains psychical, social, economic, and ethical components in line with environmental sociology's call for a new ecological paradigm.

CONCLUSIONS

Significance, Limitations, and Future Considerations

WHY REVISITING EARLY CRITICAL THEORY IS BENEFICIAL

Scholars that revisit and reinterpret social theories must inevitably question the importance of such excavation projects. Some believe it is a waste of time to repeatedly analyze the ins and outs of theoretical systems—categorizing and nuancing here, problematizing and revising there—because one "[risks] wandering into the houses of mirrors, brilliant but exitless," at the expense of pursuing studies of substantive, real life problems (Skocpol 1987:10; cf. Turner 1985). E.g., Who cares about the differences between Simmel's and Weber's approaches to neo-Kantianism? What possible significance could Durkheim's dated pedagogy have for education today? Is another meticulous study of Marx's theory of crisis really necessary? If sociology is the scientific study of society, why not study society instead of pursuing another inconsequential hermeneutical venture? In addition to the justifications provided by others for "wandering into houses of mirrors" (Stinchcombe 1982; Ritzer 1991; Alexander and Colomy 1992), revisiting the works of the Frankfurt School for the advancement of the sociological study of human-nature relations is valuable for three interrelated reasons: (1) it is important to get their theories right; (2) their theories can conceptually inform sociological examinations of human-nature relations; and (3) addressing the place of nature in early critical theory could potentially contribute to renewed interest in human-nature relations in critical social theory.[52]

Coser (1977) opened his memorable work on classical sociological theory with a passage from *Faust*: "What you have inherited from your fathers, acquire it in order to possess it"

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[52] Because critical theory's applications and importance for sociological animal studies are clearly stated in the conclusion of Chapter 2, I focus on the importance of this dissertation for environmental sociology here.

(Goethe [1808] 1961:114). In the case of sociological thought, methodically laboring through sometimes abstruse works to reach a higher-understanding of the ideas presented and hopefully, in turn, the social world is an intrinsically valuable endeavor. Coser's position covers my first reason for claiming this dissertation makes an important contribution: interpreting the theories of great thinkers like Horkheimer, Adorno, Marcuse, and Fromm in a nuanced and careful way is intrinsically valuable, at least in the name of clarity and out of respect for past theorists. As Adorno ([1963] 1993:1) said of Hegel, when studying a great thinker it is often better to ask what our condition would mean *for that thinker*, rather than asking what is useful, outdated, alive, dead, etc. in that thinker *for us* today, as if "because one has the dubious good fortune to live later, and because one has a professional interest in the person one is to talk about, one can sovereignly assign the dead person his place, thereby in some sense elevating oneself above him." This is not to say, of course, that criticism should be restrained in the name of hero worship or that it is wrong to pick and choose what is needed from past ideas for contemporary issues. But one must first understand the totality of the *inside* of a theoretical system before picking at it from *within*. The alternative is criticizing a somewhat shallow appearance of the ideas from the outside. In many ways, my dissertation is an attempt to help sociologists who study human-nature relations to better grasp the inner logic of early critical theory. If my dissertation at times reads as a paradoxically uncritical exegesis of critical theory with a one-sided "willingness to listen" at the expense of a healthy "willingness to suspect," as Ricoeur ([1965] 1970:27) put it, this is why: I aim to provide a fairer and clearer starting point for discourse, application, and more meaningful criticism. Further, I find their ideas to be quite useful and convincing as they are, without a clear need for fundamental revisions.

As implied, the emphasis on interpreting theory as accurately as possible is not only in the name of clarity or respect. It is also a necessary precursor for practical application. While providing a "systematic history of ideas with a practical intension," as Pusey (1987:19) put it, is certainly more in line with the German sociological tradition than the American, with very notable exceptions (e.g. Parsons [1937] 1949), it also describes the second reason I believe my dissertation makes a contribution to the literature: their theories can be used to conceptually inform sociological examinations of human-nature relations, especially through direct applications and substantial contributions to current issues in environmental sociology. I briefly summarize these contributions here:

- *On science, technology, and the environment*: Early critical theory argued that science and technology, while largely utilized to dominate the external natural world in capitalist societies, can and should be reformed to meet different goals in a better society.

- *On capitalism and the environment*: Agreeing with Marxist environmental sociologists today, all four theorists argued that capitalism was not only inherently unsustainable due to growth-dependence, but also warned of an early cooptation of environmentalism itself.

- *On the potentials and problems of utilizing realist and constructivist frameworks*: While there is a real biophysical environment independent of human perception, as the realists argue, the Frankfurt School argued we may not have direct epistemic access to it because our perceptions of the natural world are at least partially socially determined, as the constructivists argue. The natural world is actively shaped by human beings and these activities shape our perceptions of the natural world. Understanding that nature is socially mediated helps us denaturalize human-nature relations that appear fixed.

- *On including animals in environmental sociological inquiry*: The Frankfurt School made the lives of animals a central component of their investigations of human-nature relations and unmasked the shared forms of domination experienced by both animals and marginalized human beings.

- *On gender and the environment*: The Frankfurt School theorized that the conception and treatment of woman as the more "natural" of the sexes and closer to nature than man is a socially determined byproduct of a patriarchal society, yet argued this social construction and treatment could inadvertently help improve humanity's relationship with nature, especially with animals.

- *On the relationship between social structural and ideational forces in human-nature relations*: Although the Frankfurt School argued that structural forces are primarily responsible for environmental degradation, they did not neglect the role of ideational forces in maintaining these structures. The latter can be seen in the emphasis on ideology and reason in Horkheimer, Adorno, and Marcuse and on character structure in Fromm.

- *On the relationship between environmental domination/exploitation/injustice and social domination/exploitation/injustice*: Agreeing with many contemporary environmental sociologists, the Frankfurt School argued that environmental problems are outgrowths of social problems. Yet they also inverted this equation and argued the instrumental treatment of humans by other humans is at least partially rooted in humanity's instrumental treatment of nature.

- *On the improvement of human-nature relation*s: Marcuse called for an aesthetic ethic and reformation of science and technology; Adorno and Horkheimer for a remembrance of human naturalness and a radicalized compassionate temperament; and Fromm for a

biophilous change in society and social character. All four theorists analyzed argued that

fundamentally improving our relationship with the environment is likely an impossibility

in capitalist societies.

In short, the first-generation Frankfurt School has undeniable applications for sociological

examinations of human-nature relations. As I stated in Chapter 1, I am unaware of a social

theorist or group of social theorists before modern environmentalism that examined and

criticized humanity's relationship with the environment as thoroughly as the Frankfurt School.

In addition to contributions to environmental sociological literature, the third reason I

believe this dissertation makes a contribution is it can potentially help reformulate contemporary

critical theoretical work in sociology. The dissertation begins a conversation *between*

environmental sociology and critical theory (i.e. the purpose is not to one-sidedly inject critical

theory into environmental sociology). As stated in the introduction, many contemporary critical

sociologists overlook Adorno's, Horkheimer's, Marcuse's, and Fromm's assessments of human-

nature relations, focusing on their applications for understanding human society and/or

embracing their critique and alternative to positivistic approaches to sociological inquiry. I hope

that my project can make otherwise human-centered critical theorists interested in environmental

sociology and to perhaps even reorient their work to study human-nature relations as the first-

generation theorists did.

LIMITATIONS

There are two general limitations of this dissertation. One limitation results from my

unilingualism and the other is due to the Frankfurt School's inattention to the natural sciences.

First, my inability to read German did not present any problems with Fromm, as all of his major

works from *Escape from Freedom* on were written in English. Similarly, Marcuse's major

works from *Reason and Revolution* on were written in English. Although most of the works by

Marcuse and Adorno written in German have been translated into English, there will always be

some level of substantive meaning lost in translation, especially when translating a writer like

Adorno (see Jameson 1990:ix-x). The inability to explore Horkheimer's entire corpus was the

greatest shortcoming of this dissertation caused by my inability to read German. A massive 19

volumes are currently available in German while only a few collections of essays, a book of

notes, *Eclipse of Reason* (originally written in English), and *Dialectic of Enlightenment* are

available in English.

Second, as stated in the introduction, the most valid criticism of the Frankfurt School

leveled by environmental sociologists concerns their failure to incorporate the ecological

sciences available to them at the time into their theories. Without question, the primary

contribution of the first-generation Frankfurt School for environmental sociology is an array of

unique conceptual and theoretical frameworks for understanding the human dimensions of

environmental problems. The fact that their analyses do not include specifics about the

biogeochemical workings of the natural world is certainly a setback. But this does not suggest

that environmental sociologists drawing from early critical theory should fail to incorporate the

ecological sciences as well.   In other words, there is no obvious barrier between critical theory

and ecology; the Frankfurt theorists simply overlooked the specifics of the latter.

FUTURE CONSIDERATIONS: COMMUNICATION AND NATURE

Jürgen Habermas became Adorno's research assistant five years after the official reestablishment

of the Institute in postwar Germany. Due to Horkheimer's distaste for Habermas and his

dissertation (Habermas [1962] 1989), Habermas left the Institute shortly after—later to replace

Horkheimer's position in 1964 (Wiggershaus 1994:537ff). Habermas is most renowned for his

theory of the public sphere ([1962] 1989), his theory of knowledge ([1968] 1971), his attack on

the postmodernists and defense of Enlightenment ideals (e.g. [1985] 1987), and his formulation

of the theory of communicative action and discourse ethics (e.g. [1976] 1979; [1981] 1984;

[1981] 1987; [1983] 1990). Although there is a fair amount of fundamental theoretical and

programmatic continuity between Habermas and the earlier critical theorists (Held 1980:253f) he

shifted critical theory's focus to the study of language and its emancipatory potential (sometimes

termed the communicative or linguistic turn in critical theory). An important break between the

first-generation's and Habermas' critical theory is the absence of a critique of the human

domination of nature in the latter.[53] This is perhaps *the* fundamental revision of critical theory

that organized the rest of Habermas' positions (Honneth 1979; Whitebook 1979). Due to the

proliferation of instrumental reason in the process of dominating nature, the first-generation

Frankfurt School argued that humankind has been forced to dominate their own inner nature,

creating a condition in which "the material preconditions for a free society have been created

[i.e. the "forces of production"], the subjective conditions for its realization [i.e. revolutionary

consciousness] … have been distorted" (Whitebook 1979:42). The conclusions of the first-

generation declared that instrumental calculation had become *total*, closing off avenues for

fundamental social change. Following, the first-generation became incapable of identifying the

contradictions of capitalist society that could lead to a better society and were "capable only of

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[53] This is not to say that Habermas has been silent about, what he called, "the ecological problematic" (Habermas 1982:247; cf. Smith 2003:68-9). Before the majority of social scientists, Habermas had already incorporated early concerns with global warming in *Legitimation Crisis* ([1973] 1975:41-43). Further, in "New Social Movements" (1981:35) Habermas characterized the environmental movement as a movement to resist "tendencies to colonize the life-world" (though frames the movement as "defensive"). For Habermas (1981:35), "[t]he large industrial intervention in ecological balances, the scarcity of non-renewable natural resources, and the demographic development present industrially developed societies with serious problems."

exposing the historical embodiments of unreason" (Roderick 1986:39). In other words, the *telos* of the critical theory of society itself was self-declared an historical impossibility. Following, Habermas attempted to justify and revise critical theory because he felt it had strayed from its objective: an emancipatory project that sought to link theory and practice as well as social science and philosophy to form a better society. He attempted to purge critical theory of Horkheimer and Adorno's "blackness" (non-constructive pessimism) (Habermas [1985] 1987:106) by responding to the first-generation in three ways. First, he criticized the assumed Judeo-Christian theological underpinnings of the first-generation's call for reconciliation with nature and Marcuse's call for a "new" science and technology. Second, he developed a philosophical anthropology where the domination of nature is posited as an ahistorical and transcendental human interest. Third, he analytically uncoupled communicative rationality from instrumental rationality and argued the former is the proper type of reason proper for humans while the latter type is for nature.

For Habermas, any normative theory that seeks such a "resurrection" of nature (allegedly the early Marx and first-generation critical theorists) are, in Habermas' system of thought, remnants of a Judeo-Christian mysticism (Habermas [1968, 1969] 1970:85-87; cf. [1968] 1971:32-33).[54] Marx ([1844] 1964:137) described the coming unity of humanity and nature under communism as "the true resurrection of nature—the naturalism of man and the humanism of nature both brought to fulfillment." Like Habermas' ([1960] 1983) earlier criticism of Ernst Bloch ([1955] 1986:686-99), Adorno's call for humankind's reconciliation with nature was unfounded after being stripped of its supposed theological foundations. In Habermas' scheme (see [1969] 1983:107-8), Adorno's insistence on society's need to reconcile relations with the

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[54] Whitebook (1979:55) described reconciliation as the "transformation of our relation to and knowledge of nature such that nature would once again be taken as purposeful, meaningful or as possessing value." It is difficult to understand why Habermas can only conceive of this in purely mystical and theological ways.

environment "extends the model of social interaction to natural contexts, and thus overtaxes it. If the idea of reconciliation relies for its viability only on an earlier, originally theological, and theoretically no longer tenable notion, then, of course, Adorno's criteria for a truly rational society … also becomes impractical" (Honneth 1979:50; cf. Hohendahl 1985:6f). Without a sound basis, the notion of reconciliation was cast aside as "a rather extravagant idea" rather than "a sympathetic bond [that] has been torn asunder that has to be reestablished" (Habermas [1969] 1983:108). Because moral norms can only be established through undistorted and inclusive communication in Habermas' system, he provided a lyrical way of cementing the primary difference between his normative vision and the first-generation's: Habermas' ([1969] 1983:107) vision "would not entail the demand that nature open up its eyes, that in the condition of reconciliation we talk with animals, plants, and rocks." Or, more simply, human emancipation does not necessitate reconciliation.

In "Science and Technology as 'Ideology'" (Habermas [1968, 1969] 1970:81-122) Habermas famously rejected Marcuse's normative theory of the potential for a new science and technology (see Chapter 1). For Habermas, Marcuse's vision of a new science and technology is simply a vestige of mysticism. Without its erroneous theological basis:

> [t]he idea of a New Science will not stand up to logical scrutiny any more than
> that of a New Technology, if indeed science is to retain the meaning of modern
> science inherently oriented to possible technical control. For this function, as for
> scientific-technical progress in general, there is no more "humane" substitute
> (Habermas [1968, 1969] 1970:88).

For Habermas, it is impossible for humankind to seek "fraternal" instead of exploitative relations with nature in modern societies, or in any future socialist society seeing as "the achievements of

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technology … could not be substituted for by an awakened nature" (Habermas [1968, 1969] 1970:88). Rather than a historical project that can be transformed, the instrumental control of nature as perfected in scientific methodology and embodied in technology was conceived by Habermas as an *ahistorical human interest*.

As implied, the second way Habermas circumvented the conclusions of the first-generation was through the development of a philosophical anthropology that posited the instrumental mastery of nature for human aims as an ahistorical "knowledge-constitutive" or "quasi-transcendental" human interest. In *Knowledge and Human Interests* ([1968] 1971) Habermas argued that human beings have a natural, ahistorical interest in the technical control of natural processes for self-preservation and species survival:

> [t]he conditions of instrumental action arose contingently in the natural evolution
>
> of the human species. At the same time, however, with transcendental necessity,
>
> they bind our knowledge of nature to the interest of possible technical control
>
> over natural processes. The objectivity of the possible objects of experiences is
>
> constituted within a conceptual-perceptual scheme rooted in deep-seated
>
> structures of human action; this scheme is equally binding on all subjects that
>
> keep alive through labor (Habermas [1968] 1971:35).

That is, the instrumental control of external nature is naturalized: human beings have always and will continue to dominate the external natural world for self-preservation. The quasi-transcendental need to expropriate the natural world through labor (instrumental action) for self-preservation leads to advancements in learning ("empirical-analytic inquiry," or, science) that can more effectively expropriate the biophysical world through technology (means of

production). McCarthy (1978:66) captured the radical departure Habermas' conception of a

naturalized technical interest made from the first-generation:

> [i]t appears that this conception limits our knowledge of nature to information that
>
> is technically utilizable and our intercourse with nature to instrumental mastery of
>
> objectified processes. Horkheimer and Adorno, as well as Marcuse, explicitly
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> rejected any such limitation. They argued, in fact, that the orientation exclusively
>
> to the domination of nature was a basic factor in the deformation of subjective
>
> capacities for emancipation.

In short, Habermas' philosophical anthropology posited that the total domination of nature under

capitalism that so concerned the first-generation was simply an outgrowth of the human species'

natural, ahistorical interest in nature domination.

Although Habermas has since revised his early philosophical anthropology presented in

Knowledge and Human Interests (McCarthy 1978:53), his theory of communication still bears

striking similarities to his early work when analyzing how human-nature relations are theorized.

Habermas' third way of circumventing the conclusions of the first-generation, and linked to his

semi-abandoned philosophical anthropology, was to provide a "dualistic solution to the dialectic

of Enlightenment" (Alford 1985:14), by uncoupling communicative from instrumental rationality

and action (see Habermas [1976] 1979; [1981] 1984; [1981] 1987). He maintained that the first-

generation "too fell victim to the Weberian error of conceiving reason too narrowly" (Roderick

1986:125). For Habermas, the solution was to re-analytically separate reason into a typology—

most importantly, the separation of purposive/instrumental rationality from

communicative/practical rationality—in order to establish a normative foundation for critique

and means for human emancipation. For Habermas, the separation of the world into its three

modern "domains of reality" (external nature, society, internal nature) have corresponding and fitting forms of rationality (purposive/instrumental, communicative, expressive/evaluative), attitudes (objectivating, norm-conformative, expressive), and "value spheres" (science, morality, art) (Habermas [1976] 1979; [1981] 1984). This differentiation is not only a defining feature of modernity epitomized by Kant's three critiques, but a *prerequisite* for a "rational conduct of life" because, for Habermas ([1981] 1984:71), premodern societies with a "mystical" view of life do "not permit differentiation between the world of existing states of affairs, valid norms and expressible subjective experiences" ([1981] 1984:48-74). Most importantly, cultural rationalization was necessary to firmly separate what *is* ("the world of existing states of affairs") from what *ought* to be and how we *ought* to act (through "valid norms"). Here, Habermas' post-philosophical anthropological work on communication is more historical but remains uncritical of instrumental human-nature relations. This may be due to Habermas' (see 1982:248-49; [1981] 1984:239) belief that nature lies outside questions of morality (as foreshadowed in his critique of Marcuse, Bloch, and Adorno and notion of a technical interest).[55] For Habermas, the proper functioning of further rationalization is dramatically different for humans than for nature: "in the purposive-rational [instrumental] sense refers to the growing capacity to control nature," while the rationalization of communicative action is to better establish valid worldviews, laws, and morality for those capable of human speech and understanding mutually-binding norms (Roderick 1986:101; e.g. Habermas [1976] 1979:117f). In the modern world, communicative rationality is for humans while instrumental rationality is for nature (Habermas [1981] 1984:48-74), and there is neither need nor justification for overlap (Habermas 1982).

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[55] However, he has hinted at the possibility of developing an animal ethics (Habermas 1993:105-11), though he maintains that nature at large lies outside questions of morality and justice (Habermas 1982; 1993).

Habermas' system not only explains and describes the instrumental treatment of nature, but normatively accepts this characteristic of modernity as well. However, what is theoretically difficult to decipher in his theory of communication (see Habermas [1981] 1984:144f) is if he (a) rejected the *empirical* claim of first-generation (that the domination of nature leads to the domination of human beings) or (b) argued that domination of nature does not *necessarily* result in the domination of human beings. He does not make clear if his approach to critical theory is a *theoretical* ironing-out of the social ecological contradiction presented by the first-generation or a refutation that this contradiction ever existed in reality. One aspect of Habermas' vision is clear, however. He does not conceive of the purely instrumental treatment of external nature as a normative problem as the first-generation did. Alford (1985:77) explained this perfectly: "[t]he goal of Habermas' project can be expressed in one sentence: to prevent social relations from becoming like our relations with the natural world." The first-generation would identify with this program, but added a radically different qualification: to prevent social relations from becoming like our relations with the natural world, we must qualitatively alter our relations with the natural world. Thus, Habermas views the potential for utopia in unconstrained communication (i.e. in *human* intersubjectivity) while the first-generation saw the potential for utopia in humanity's reconciliation with nature, a divide already recognized by Horkheimer in the late 1950s (see Wiggershaus 1994:580).

Due to Habermas' anthropocentrism and break with the first-generation Frankfurt School's social ecology, some environmental scholars—many environmental philosophers and political theorists—have systematically criticized Habermas' applications for understanding and altering human relations with nature (Di Norcia 1974; Whitebook 1979; Bookchin 1982b; Ottman 1982; Eckersley 1990; Murphy 1994; Krebs 1997; Nelson 2011). Despite the fact that

Habermas' program is primarily concerned with social systems, communication, and moral and political philosophy, a number of environmental scholars—many environmental sociologists and human ecologists—have argued that Habermas' social thought has important applications for improving humanity's relationship with the environment (Dietz 1984; 1987; 1988; 1992; 1994; 2003; 2013; Dryzek 1987; 1990; 1992; 1995; Renn 1992; 1999; 2004; 2006; 2008; Brulle 1993; 2000; 2002; Webler 1993; 1995; Tuler and Webler 1993; Vogel 1996; Elling 2008; U. S. National Research Council 2008; Rosa, Renn, and McCright 2013). Specifically, the latter scholars are developing discourse-based models to reconcile facts and values for evaluating and making deliberative democratic decisions about social and environmental policies, risks, and problems. Habermas' environmental critics have framed Habermas as an anthropocentric Kantian who radically separated human life from the rest of nature (except for its mastering) and offers environmental thought very little unless fundamentally and extensively revised. Habermas' environmental supporters argue his framework provides the practical tools for improving human-nature relations through discursive-based strategies, which may or may not be in need of some revisions. Habermas' environmental critics emphasize his *substantive* claims about human-nature relations (e.g. his technical interest, separation of communicative reason from humanity's relations with nature, etc.) whereas Habermas' environmental supporters emphasize how his *procedural* theories can help fashion an ecologically-sound democracy (e.g. his ideal speech situation, emphasis on deliberation, discourse ethics, etc.).

I sympathize with both camps as the central claims that organize these distinct environmental interpretations are correct: Habermas relies on rather anthropocentric assumptions *and* has provided procedural tools that can be potentially utilized to improve human-nature relations. That is, both show the limits and potentials of adopting a Habermasian framework.

Further studies should begin to synthesize the strongest contributions of Habermas'

environmental critics and supporters. The best way to go about doing this may be to (1) continue

developing and revising discourse-based models for solving environmental problems (2) while

incorporating the legitimate concerns leveled by Habermas' environmental critics. (2) is crucial

as many imperative ethical, empirical, and even metaphysical problems cannot be answered

working *within* Habermas' scheme and his procedural theories are *built upon* his substantive

claims about human-nature relations. However, environmental scholars should not throw

Habermas' continuation of critical theory out with his anthropocentrism. His environmental

supporters have convincingly shown that developing his human-centered theory of

communicative reason can paradoxically inform normative inquiries concerning our relations

with nature. That is, the normative commitment of the first-generation to reconcile human-

nature relations can and should be sustained through the communicative turn:

> [l]anguage reflects the longings of the oppressed and the plight of nature, it
>
> releases the mimetic impulse. The transformation of this impulse into the
>
> universal medium of language rather than into destructive action means that
>
> potentially nihilistic energies work for reconciliation. (Horkheimer 1947:179)

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