The Challenge of Ecology to the Humanities: An Introduction

Heather I. Sullivan and Bernhard F. Malkmus

"Humboldt, culture, Humboldt, culture," exclaims Emmanuel Lévinas, throwing his arms into the air and shaking his tuft of hair, powdered white for the occasion. The roaring laughter of his fellow students accompanies the satirical performance. It is April 23, 1929, in Davos, Switzerland. Earlier that day, Ernst Cassirer and Martin Heidegger had finished their lectures and debates at the *Davoser Hochschulgespräche*, and now students were debating and mockingly reenacting what Peter Gordon dubs a momentous "continental divide" in intellectual history. Lévinas, then a young student of Edmund Husserl and admirer of Heidegger, poked fun at Cassirer's bourgeois *habitus* and trust in the transformative power of culture.[1] Many agreed at the time that Heidegger had cut the better figure in the debates and had been more in touch with the sentiments of the post–World War I generation. Yet this assessment is less evident from today's perspective.

While Cassirer stresses that humans need to realize themselves as rational beings again and again, Heidegger emphasizes that humans can never realize themselves; all they can hope for is to become good caretakers of what is

The editors express their gratitude to the Transatlantic Network in Environmental Humanities, organized by Sabine Wilke (University of Washington) and supported by the Alexander von Humboldt—Stiftung (Foundation),, for facilitating the exchange of ideas among several participants in this special issue during two conferences.

1. See Poirié, *Emmanuel Lévinas*, 78.

New German Critique 128, Vol. 43, No. 2, August 2016
DOI 10.1215/0094033X-3511835 © 2016 by New German Critique, Inc.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

given to them, responsible "shepherds of Being." For Cassirer, humans become humans by engaging in symbolic praxes that constitute worlds of meaning and thus become "the objective spheres we experience as beautiful, moral, and true." For Heidegger, humans become humans by forming world "in the midst of conditions we had to share in creating and cannot hope to control," rather than by creating new worlds.[2] He refutes the latter as a metaphysical illusion deriving from the human desire for cognitive mastery and domination and, instead, emphasizes the experiences of finitude and mortality. In other words, Davos is a debate about the nature of the human: for Cassirer, it is about the symbolic; for Heidegger, it is about the ontological basis of culture *as* human nature.

Both approaches are concerned with the conceptualization of human surroundings: is the environment of the human tantamount to the worlds of meaning that emerge from human spontaneity of symbolic expression, or is it tantamount to the world in which we cannot help but disclose ourselves to the historicity of our existence? In this context, Cassirer and Heidegger engage, independently, with the pioneering work of the Baltic biologist Jakob von Uexküll, who established the Institut für Umweltforschung in Hamburg in 1925 and worked on questions of ecology and biosemiotics. His concept of *Umwelt* (environment), as opposed to *Umgebung* (surroundings), is defined as species-specific: for him, there is no such thing as an objective *Umgebung*; there is only a multiplicity of *Umwelten*, determined by the relevance for and neuronal wiring of a respective species.[3] Both Cassirer and Heidegger use Uexküll to furnish very different arguments, one essentially humanist, the other "post"-humanist.

Heidegger, indebted to Max Scheler, categorizes all living things in terms of how they relate to their environs: "Because plants and animals are lodged in their respective environments but are never placed freely in the clearing of Being which alone is 'world,' they lack language. But in being denied language they are not thereby suspended worldlessly in their environment. Still, in this word 'environment' converges all that is puzzling about living creatures."[4] Humans and animals have in common that their respective *Umwelt*

2. Gordon, *Continental Divide*, 6–7.

3. See Uexküll, *Umwelt und Innenwelt der Tiere*, 248–53; see also Uexküll, *Foray into the Worlds of Animals and Humans*, e.g., 53–72.

4. Heidegger, "Letter on Humanism," 230; the earliest articulation of this can be found just after the Davos debate in *Die Grundbegriffe der Metaphysik*, e.g., 345–76. Anson Rabinbach analyzes the "Letter" as Heidegger's attempt to exonerate himself from his engagement with National Socialism; see *In the Shadow of Catastrophe*, chap. 3. Heidegger's concept of the human and its reception history are subjected to new scrutiny in light of the anti-Semitic passages in *Schwarze Hefte*, in particular, his ontological association of Jews with a "weltlose" mode of existence. For a first assessment of the debate, see Trawny, *Irrnisfuge*.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

matters to them, delimits their range, and is defined by their activities; what is different in humans is that they experience that *Umwelt* as a world always shaped by investment and care before it is reflected as their world—as a unity of experiential "living-through," or *Er-leben*.[5] Cassirer adopts the same basic argument yet puts it in the service of his philosophy of culture: "As soon as we enter the world of specifically human consciousness and specifically human ways of fashioning the world, the closed ring of receptivity [a term reminiscent of Uexküll] appears to be broken."[6] For him, this expulsion from the security of the receptor sphere—eulogized in the poetry of yet another avid reader of Uexküll, Rainer Maria Rilke[7]—seemed to "confirm Kant's original image of the human being as a creature capable of bursting the limits of its own finitude so as to attain an order of truly objective meaning."[8] What marks the origin of culture is precisely the ability to devise forms that transcend and sublate the preceding structure of interest and care. Susanne Langer takes this farther and reflects on both aesthetic and organic experiences as manifestations of the expressiveness of life, embraced by Cassirer as the "breaking" of the "closed ring of receptivity." Art, she writes in a diction modeled on his, is "the creation of forms symbolic of human feeling"—it functions as virtual reality that allows us to be in touch with our organic existence and with the origin of what she conceives as evolutionarily developed "values."[9]

In recent years, especially since the University of Minnesota Press published *A Foray into the Worlds of Animals and Humans* (1934) in a new translation and as a kind of manifesto in its posthumanities series (2010), Uexküll's ecology has been somewhat dissociated from its historical context and reception history in the interwar period. Especially in the United States, it has become a point of reference for modes of conceptualizing the human beyond the concerns of the Davos combatants and more in line with what one of the teenage characters in Peter Høeg's novel *Borderliners* notes after an experimental biology class, "Uexküll said that man is not that much better than a spider."[10] Even without relating their conceptualization of the human to

5. Gordon, *Continental Divide*, 73, with reference to *Sein und Zeit*, 47. For a recent critical engagement, see Santner, *On Creaturely Life*, chap. 1; Agamben, *Open*, 57–62; and Derrida, "Geschlecht II: Heidegger's Hand." For a primate-studies perspective, see de Waal and Tyack, *Animal Social Complexity*.

6. Cassirer, "On the Metaphysics of Symbolic Forms," quoted in Gordon, *Continental Divide*, 75; see also Cassirer, *Essay on Man*, 63–71.

7. See the eighth Duino elegy.

8. Gordon, *Continental Divide*, 75.

9. Langer, *Feeling and Form*, 40.

10. Høeg, *Borderliners*, 227. For a level-headed interpretation of the role of Uexküll in philosophy, see Buchanan, *Onto-Ethologies*.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

Uexküll, textbook writers have been quick to associate Cassirer's stance in the Davos debate with humanism in a broad sense and Heidegger's position, reinforced in *Die Grundbegriffe der Metaphysik* and "Brief über den Humanismus," as an attempt to overcome the (open or tacit) metaphysical assumptions of European Enlightenment humanism by devising an ontology beyond these assumptions—a kind of posthumanism. Lévinas's youthful mocking of Cassirer in 1929 is also an expression of the impatience an entire generation of intellectuals felt with humanist thinking, from Wilhelm von Humboldt's educational reform and Johann Gottfried Herder's universalism to Wilhelm Dilthey's hermeneutics and Werner Jaeger's classicist ideal of self-education—a tradition that extends into more recent debates involving Hans Jonas and Dipesh Chakrabarty. Heidegger's existentialist interpretation of Uexküll, by contrast, was perceived as a form of liberation—both by young European intellectuals in the late 1920s and by philosophers after World War II. The French reception of Heidegger, sparked by the "Brief über den Humanismus," set the tone for posthumanist modes of thinking that run through significant currents of poststructuralism, deconstruction, and postmodernist theory in particular and still looms large in what is commonly referred to as "theory."[11] Yet, given the numerous challenges of ecology to the humanities today, it is less clear where to locate a higher potential for squaring ethics and emancipation. Therefore, we are interested in revisiting these trajectories and their intellectual potential in light of rapid global degradation that frames the notion of *Umwelt* in radically new ways—and with it the conceptualization of the human. As Chakrabarty emphasizes, globalization imposes conflicting demands on human self-reflection: on the one hand, it requires that humans increasingly be experts in understanding and navigating cultural and historical differences; on the other, anthropogenic climate change and other environmental effects of the fossil-fuel age enforce a view of humans as "already always constituted as one, as members perhaps of one species that through its simultaneous co-existence on the planet and its shared, though uneven, search for the good life, has degraded its own biosphere."[12]

During the past forty years we have witnessed social, political, and economic developments that have forced us to think about the boundaries between our species' *Umwelt* and other species' *Umwelten* in new ways and with unprecedented urgency—ways that have led scholars to proclaim an "era of ecology,"[13]

11. See Skidelsky, *Ernst Cassirer*, chaps. 8–9.
12. Chakrabarty, "Humanism in a Global World," 25.
13. See Radkau, *Ära der Ökologie*.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

or the Anthropocene.[14] The human impact progressively resembles the impact of a geological force and thus enforces a radical reorientation of human self-reflection.[15] Humans are the hemerophiles of the wasteland created by their ingenuity. Technology has replaced social and religious mechanisms and extended human life into a vast range of habitats while threatening to destroy the organic basis of that very life.

Helmuth Plessner, trying to wed evolutionary theory of his time to epistemology, devised the concept of "eccentric positionality," according to which humans relate to their body in two different ways—as *Körper* and *Leib*, as the body you have (and care for or neglect) and the body you are (and rejoice in or suffer through).[16] For him, humans inadvertently rely on a network of artifacts; this natural artificiality (*natürliche Künstlichkeit*) of humans is coupled with their ability to adopt a utopian standpoint: we actively integrate into cultural and symbolic codes, in Cassirer's sense, but we also remake and unmake these codes and inadvertently project them into the future:[17] "We have to make ourselves, and our making is also an unmaking. We *are*, like other things, physicochemical systems; we *live*, like other animals, bodily lives dependent on bodily needs and functions, but we *exist* as human beings on the edge between nature and art, reality and its denial. That is both our peril and our opportunity."[18]

In evolutionary terms, the human species, by virtue of this ability (or compulsion) to create prosthetic extensions and project itself into the future, has demonstrated an adaptive capacity unrivaled among vertebrates. It has, however, also become evident that the increased velocity of our adaptations to our environs has come at tremendous costs: habitat destruction, loss of biodiversity, pollution, depletion of soil and resources—not to speak of the looming social, economic, and psychological devastation in the wake of the global environmental crisis. This crisis is *global* in that it has impacts across the planet, though debates continue to rage about who is responsible and who

14. Crutzen and Stoermer, "Anthropocene." For recent discussions in philosophical and aesthetic contexts, see Bonneuil and Fressoz, *L'événement anthropocène*; and Klingan et al., *Textures of the Anthropocene*.

15. A valuable introduction to the concept and its reverberations can be found in Zalasiewicz, *Earth after Us*; and Schwägerl, *Menschenzeit*. Chakrabarty's recent work, culminating in his 2015 Tanner Lectures at Yale University ("Climate of History"), has led to a controversy about the applicability of the Anthropocene debate to concepts of time, history, and modernity. See also Welzer, Soeffner, and Giesecke, *KlimaKulturen*; Malkmus, "Naturgeschichten vom Fisch"; and Heise, *Imagining Extinction*.

16. Plessner, "Der Mensch als Lebewesen," 12.

17. See ibid., 55–61. For an account of Plessner's relevance for contemporary bioethical discussions, see Peterson, "All That We Are."

18. Grene, "People and Other Animals," 360.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

should shoulder the burden of responding to it.[19] The crisis is also *universal* in that beyond it there is no "nature" (as the Romantics and, maybe, Heidegger had hoped for) or "culture" (as the Enlightenment and, maybe, Cassirer had promised) to which we could resort. The crisis is *environmental*: it forces us to rethink ourselves both as biological species and as cultural agent, as creature and creator, since we have encroached on so many *Umwelten* beyond the *Umwelt* for which our evolutionary hardwiring has equipped us. Furthermore, the problems amount to a *crisis*: we are forced as a matter of survival to use our ability to "discern" (Gr. κρίνειν) and exert self-critique in addressing these problems.

The late Ulrich Beck refines this "reflexive" modernity by looking at risk as its defining feature and observes that "risk awareness is based not on 'secondhand experience' but on 'secondhand nonexperience.' Even more pointedly: ultimately, no one can know of risks if knowing means having consciously experienced them."[20] On a global scale, this leads to an "institutionalized contradiction" that becomes particularly evident in the politics of climate change, which, he maintains, "often focuses on the *post hoc* corollaries and ignores the conditions and causes producing and reproducing climate issues as 'unnoticed side-effects,'" to begin with.[21] Climate change thus will both increase global injustice and erode it, since even the oligarchies best equipped to evade its consequences will ultimately feel them; by both jeopardizing and potentially strengthening democratic structures, Beck claims, it enforces two trends.[22] First, there is the epistemic shift from a modernity obsessed with annihilating ambiguity to a reflexive modernity defined by ambiguity (at long last, we thus would have become "moderns," in Bruno Latour's sense). Second, global risk means that our mundane lives become truly *mondaines*, or cosmopolitan: "The distant other becomes the inner other—not due to migration but rather due to global interconnection and global risks."[23]

The ability to anticipate the consequences of our social, political, and economic behavior—as opposed to reacting to ensuing problems—is also a litmus test for our continued success as a species. Do human problem-solving skills lead to the concerted efforts necessary to address the challenges of a global ecological crisis, or are they part of the crises that lead to ever-increasing precariousness of the human *Umwelt*? Are humans, in the etymological sense of the word, "critical" enough to understand that the evolutionary

19. See Nixon, *Slow Violence*.

20. Beck, *Risikogesellschaft*, 96.

21. Beck, "Klima des Wandels," 40.

22. Ibid., 38.

23. Ibid., 39. Chakrabarty speaks of a universal that "arises from a shared sense of a catastrophe" ("Climate of History," 221–22).

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

baggage of species-ism (in the form of anthropocentrism) is both a critical ethical opportunity (the ability to conceive "humankind" rather than only individuals or specific communities) and a critical ethical limitation (the hubris that ignores the interdependency of life)?[24] After all, as the philosopher Kate Soper reminds us, "relative to other creatures, human beings are underdetermined by nature, and the possibilities of action become available to them that much greater in consequence." Therefore, she continues, it is not "by reference to the intrinsic qualities of non-animate nature nor by recalling us to our fundamental kinship with other living creatures, that we can best address—and improve upon—our current ecological situation, but by confronting the distinctively human appetite for innovative forms of cultural transcendence and individualizing self-expression."[25]

This anthropological humanism endorses a kind of self-reflexive anthropocentrism whose primary concern is whether humankind in the twenty-first century can assume agency within Beck's reflexive modernity or else will succumb to the destructive momentum of an industrial capitalism that "determines the style of life of all individuals born into it," in Max Weber's famous phrase, "until the last ton of fossil fuel has burnt to ashes."[26] Accordingly, Soper insists, the vital question of the future will be whether humans are willing or able to maintain and renew an emancipatory agenda within this new global framework of crisis or risk, thus enabling "ways of living rich, complex, creative, nonrepetitive lives without social injustice and without environmental damage."[27] In other words, it is invested in establishing the framework for a mode of living that Erich Fromm—in his syncretistic dialogue with Marx, Freud, and ancient religious thinkers—terms the mode of "to be," as opposed to the mode of "to have" that dominates consumerist societies.[28] Fromm's so-called normative humanism is directed against sociological relativism and based on the assumption that humans are reliant on fulfilling both physical and psychic basic needs, the most important of which he regards as universal (and not, as Freud claimed, rooted in physical impulses or drives)—such as identity and a sense of belonging, friendship and love, a scope for self-expression and creativity.[29] The ecological question is thus also a cultural and spiritual one.[30]

24. See Mayr, *This Is Biology*, 210–18.
25. Soper, "Humanism in Posthumanism," 366.
26. Weber, *Protestant Ethic*, 123.
27. Soper, "Humanism in Posthumanism," 366.
28. Fromm, *To Have or to Be?*
29. See Fromm, *Sane Society*.
30. This dimension is also emphasized by Albert Schweitzer's philosophy of "reverence for life"; see *Die Ehrfurcht vor dem Leben*.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

Accordingly, Jonas, whose *Das Prinzip Verantwortung* is regarded as a foundational text for an environmental humanism, reformulated Kant's ethical maxim as an ecological imperative: "Act so that the effects of your action are compatible with the permanence of genuine human life" (Handle so, dass die Wirkungen deiner Handlungen verträglich sind mit der Permanenz echten menschlichen Lebens auf Erden).[31] Jonas maintains that the major challenge to humankind today is ultimately a challenge to human imagination: we are called on to imagine the impact of our everyday behavior on the lives of future generations. What is needed is a new social contract among autonomous subjects—in this regard, he is firmly embedded in an Enlightenment humanism—that includes future generations. Human responsibility today also includes potential beings who will be forced to bear out the consequences of our attitudes and actions, namely, our children and grandchildren. What connects Jonas with Fromm is an endorsement of a joyful ascetic praxis as countercultural impulse in a context of rampant consumerism and the blind reliance on growth.

Gernot Böhme roots Jonas's appeal to responsibility in a rethinking of the division between the human and nature, which leads him to an endorsement of the corporeal sense of the self. Drawing on Maurice Merleau-Ponty and Hermann Schmitz, Böhme maintains that experiencing nature beyond the human sphere is also an exercise in recovering human creatureliness and physicality and that this discovery has both ethical and aesthetic implications.[32] His approach continues the critique of metaphysics in a phenomenological vein and modifies Heidegger's insistence on human finitude by a "somatics" that locates the ability of social critique in the fact that "we experience in our own bodies what our society has done to our earth."[33] In that regard, it is a *Kulturkritik* inspired by the Frankfurt School yet critical of Theodor W. Adorno's conceptualization of nature ("das Naturschöne," in *Aesthetic Theory*) as a realm outside social power structures.[34] Böhme privileges eighteenth-century sensual and atmosphere-oriented aesthetics over the division between the human and nature articulated in Kant's aesthetic attitude of disinterestedness. Böhme's "ecological aesthetics of nature" acknowledges Cassirer's point that man "cannot live his life without expressing his life," but is equally interested in the *im*pressions made by the animate and inanimate world on humans.[35] The mutual reinforce-

31. Jonas, *Imperative of Responsibility*, 37; *Das Prinzip Verantwortung*, 36. Stephen Jay Gould, coming from a life science perspective, offers a similar maxim in "Golden Rule."

32. See Böhme, *Für eine ökologische Naturästhetik*, 6.

33. Rigby, "Gernot Böhme's Ecological Aesthetics of Atmosphere," 141, 139.

34. See also Goebel, "Sublimation of Nature."

35. Cassirer, *Essay on Man*, 224.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

ment of expressivity and impressionability is united in his concept of "atmosphere."[36] He calls on the arts to resist the unbridled aestheticization of contemporary reality and to root aesthetic experience in a conversation about these atmospheres—as a social and ecological praxis. Ultimately, Böhme is invested in a humanism predicated on the experience of the "ultrahuman," or what one might call an ethics of wonder, to borrow from Neil Evernden: "In wonder we accept the presence of something entirely distinct and self-possessed. That which evokes wonder is never ours in any sense: it is 'ultrahuman.'"[37]

While these and related attempts to mobilize various anthropological insights into the human conditions for contemporary ecological concerns draw on humanist assumptions, broadly defined, recent cultural theory has also seen the emergence of approaches commonly united under the label *posthumanism*. Contemporary posthumanism similarly contextualizes human beings within their material, cultural, and ecological environs. However, it levels criticism at the commonly held humanist view that human beings exist as a separate and ontologically different category of being that manipulates the world from a transcendental subject position, striving for objectivity. Posthumanism developed initially in two specific directions: the so-called cyborg posthumanism growing out of systems and network theories, feminism, and Lacanian psychoanalysis; and animal studies, which developed from work on animal rights, increased scientific understanding of our shared genetic and behavioral heritage with other species, and the poststructuralist rethinking of the fundamental characteristics of the human in cultural theory. More recently, scholars have built on science studies, the phenomenology of Merleau-Ponty, and our growing knowledge about anthropogenic environmental devastation in order to propose a third direction for posthumanism, the one most relevant for this special issue: ecological posthumanism.

The oldest branch of posthumanism (and the most well-known in popular culture) is the "cyborg" posthumanism, according to which humans are always already intermixes of technology and the organic. In "The Cyborg Manifesto" Donna Haraway emphasizes hybridity and border crossings to overcome the dualistic emphases that dominate and permeate Western cultures.[38] She stresses a "joint kinship with animals and machines" that would break down all kinds of dichotomies.[39] Her nondualistic thinking leans toward

36. Böhme, *Atmosphäre*.
37. Evernden, *Social Creation of Nature*, 118.
38. Haraway, "Cyborg Manifesto," 471.
39. Ibid., 462.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

a hybridity with machines that would, she claims, facilitate freedom from hierarchy while upholding an emphasis on human-techno-beings, a hybridity she later revises in works focusing on our "companion species." Cyborg posthumanism continues to resonate with many technophilic utopian fantasies that often overlook and even erase fundamental ecological issues in their celebration of technological answers for every possible problem.[40] N. Katherine Hayles, for example, proposes that biological materiality is itself a mere accident, an assertion with troubling implications for the ecological conditions in which human and other bodies exist. Hayles claims that there is no reason to privilege the particular bodily substrate when *information*, whether DNA or binary code, is the essential feature of our universe.[41]

The second branch in posthumanism, animal studies, delineates a nonhierarchical contextualization of the human species on the spectrum of animal life, without which we would not survive, in terms of both food sources and coevolution with bacteria and other species.[42] Cary Wolfe follows Jacques Derrida in suggesting that we "attend to that thing called 'the human' with *greater* specificity, *greater* attention to its embodiment, embeddedness, and materiality, and how these in turn shape and are shaped by consciousness, mind, and so on."[43] For him, human experience is itself an embodied animal experience, part of the autopoietic, or self-fashioning of matter and meaning that all living things and all cultural, linguistic systems engage. Posthumanism, he notes,

> forces us to rethink our taken-for-granted modes of human experience, including the normal perceptual modes and affective states of *Homo sapiens* itself, by recontextualizing them in terms of the entire sensorium of other living beings and their own autopoietic ways of "bringing forth a world"—ways that are, since we ourselves are human *animals*, part of the evolutionary history and behavioral and psychological repertoire of the human itself.[44]

While both the animal studies and cyborg strands of posthumanism attempt to rethink the "human" by questioning the anthropocentric and binary tendencies inherent in much of traditional humanism, they still face the quan-

40. Stacy Alaimo critiques this neglect of the body's material connections to other bodies, species, and substances in *Bodily Natures*.

41. Hayles, *How We Became Posthuman*.

42. See Margulis, *Symbiotic Planet*.

43. Wolfe, *What Is Posthumanism?*, 120.

44. Ibid., xxv.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

dary of rethinking the "human" while responding to ecological crises more humanely.[45]

Ecological posthumanism confronts this problem by suggesting that we are as much human as we are also part of our environs, specifically our network of ecological relationships.[46] To preserve our surroundings is thus to preserve ourselves not just as individual cultural bodies but also as integrated species in specific ecological conditions, hence the tendency to eliminate the nature-versus-culture delineation into "nature-culture" in such posthumanism. Furthermore, human beings, as a cultural, linguistic, and technological species, thrive because of (not despite) what the environmental philosopher Val Plumwood describes as our "enabling conditions—the body, ecology, and non-human nature."[47] Ecological posthumanism does not erase or replace the "human" but notes that we remain as fully "human" as ever even while contesting the standard assumptions about exactly what the term *human* means in classical humanist discussions.

Furthermore, viewing human beings as a species in the nature-culture realm of the biosphere contextualizes individual human agency within material and inter- and intraspecies exchanges. This reshaping is a central challenge for ecological posthumanism, since it necessitates, on the one hand, rejecting the belief in the absolute autonomy of the human ratio and, on the other, perceiving the massive environmental impact of the human species on our planet: humans are thus both extraordinary agents yet not particularly agentic as individuals. Ecological posthumanism renders implausible the simplistic dichotomy that human beings are either merely another species or a separate category altogether. Louise Westling, for example, contrasts the cyborg and animal studies types of posthumanism to what she terms an "ecological ontology" that builds on Merleau-Ponty's work and addresses human beings as one of many "kindred species" emerging through coevolution. Human cultural and technological tools enable major environmental alterations but do not exclude us from our ecological context. Westling's ecology begins at the level of the human/animal body that can survive only with the support of vast quantities of bacteria jointly functioning within our bodily systems.[48] In fact, the number of microbes that share our bodies is so vast that most of the DNA we contain is not our own.

45. See Derrida, "Animal That Therefore I Am"; Wolfe, *What Is Posthumanism?*; Haraway, *Companion Species Manifesto.*

46. See Sullivan, "Ecology of Colors."

47. Plumwood, *Environmental Culture*, 17.

48. Westling, "Literature, the Environment, and the Question of the Posthuman," 36.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

Karen Barad goes even farther in that she views all agency as distributed and shared:

> Posthumanism, as I intend it here, is not calibrated to the human; on the contrary, it is about taking issue with human exceptionalism while being accountable for the role we play in the differential constitution and differential positioning of the human among other creatures. . . . Posthumanism does not attribute the source of all change to culture, denying nature any sense of agency or historicity. In fact, it refuses the idea of a natural (or, for that matter, a purely cultural) division between nature and culture.[49]

Barad thus contextualizes human agency within a materiality that is constantly forming and reforming itself, basing her work on Niels Bohr's quantum physics. In her formulation, what scientific experiments and our human "epistemic practices [document] is not nature itself but *our intra-activity as part of nature*."[50] Barad's approach takes issue with the simplified subject-object division, seeing nature itself as an ontologically creative *process* (rather than *object*) that includes our actions (thus, her concept shows an affinity to Heidegger's unity of *Er-leben*). In doing so, she reveals the fundamental porosity of our bodily boundaries: "Posthumanism eschews both humanist and structuralist accounts of the subject that position the human as either pure cause or pure effect, and the body as the natural and fixed dividing line between interiority and exteriority."[51] Ecological posthumanism, in sum, describes the human being as a technological species in the biosphere existing within active, even agential, material frameworks that mark and shape our bodies and communities as we mark and shape them, in turn. This ecologically ontological perspective emphasizes "relations" as the constitutive element rather than the entities related such that objects or individuals emerge through links at all levels from the quantum to the cosmic. In other words, ecological posthumanism postulates an ontological materiality with creatively agential capacity on many levels and in many forms, including but not limited to human beings.

The posthumanist and humanist perspectives highlighted in this volume resonate with very recent theoretical as well as much older traditions. Nevertheless, specific responses in the humanities dedicated to our recent environmental challenges were initially slow to emerge. In the past twenty years this situation has rapidly changed, and there have been significant developments in

49. Barad, *Meeting the Universe Halfway*, 136.
50. Ibid., 207.
51. Ibid., 136.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

environmental history, literary scholarship ("ecocriticism"), and environmental philosophy. These fields have thereby acknowledged that the anthropological challenge—provoked both by the ecological reconceptualizations of life and by the sociopolitical implications of living in a world society marked by global ecological risks—provides a unique opportunity for these disciplines to rethink their premises. The reasons for the delay in focused responses are manifold and range from simple navel-gazing and the linguistic or cultural totalization of life in certain disciplines to a recalcitrant positivism in others. Along with these dynamics is the ongoing inability of many discourses across the humanities to integrate findings of the life sciences into humanistic inquiry. This special issue is an attempt to resist these trends and take stock of the scope and quality of the work emerging in the environmental humanities.

Some of the interventions gravitate toward the posthumanist conviction that the perpetual global crisis calls for a sustained critique of all forms of anthropocentrism, while others embrace the critical potential of human nature and argue that a nonhierarchical and nonhubristic understanding of human exceptionalism is the only basis for moral sensibility. As Soper puts it: "To point out that we are all inter-connected in 'nature' and share much more with other animals than previously thought is all very well. But what is important eco-politically is recognition both of the role of humanity in bringing about ecological collapse, and of the distinctive capacities humans alone have to monitor, and in principle, to adjust their behavior and environmental impact."[52] Yet Soper maintains an emphasis on human agency without contextualizing it within other agencies, as ecological posthumanists are wont to do. Such contextualization provides a basis for responses without simply assuming human agency is the most powerful force that needs only to be directed appropriately. Serenella Iovino and Serpil Oppermann put it another way, asserting that our agency is a complex interactivity with what Latour termed "nature-culture": "If the new materialism's conceptualization of being, knowing, and acting culminates in a posthuman political ecology, two consequences result: the first is that an ontological vision based on the superiority of human agency over the nonhuman 'world of things' becomes problematic. The second is that we have to redraw the boundaries of the 'self.'"[53] This special issue seeks to highlight the wide range of ideas between Soper's view, which emphasizes the need for active human agency, and ecological posthumanism, which reframes such agency as a complex play among many discursive and material

52. Soper, "Humanism in Posthumanism," 237.
53. Iovino and Oppermann, "Theorizing Material Ecocriticism," 457; Latour, *Politics of Nature*.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

forces. Irrespective of individual answers to these pertinent questions, this special issue is indebted to Ottmar Ette's plea to transform the *Geisteswissenschaften* into *Lebenswissenschaften* (life sciences, or sciences for life), or even—as he argues in a forceful resuscitation of the art of German compounding that Mark Twain abhorred—into a "Zusammenlebenswissenschaft" (science for living together).[54]

Ursula K. Heise's contribution provides an overview of the environmental—or ecological—humanities as they have developed alongside other theoretical directions in the past thirty years both in the United States and internationally. She contextualizes the developments in environmental history and philosophy and in ecocriticism within the discussions of environmental crises globally that have produced the Anthropocene discourse and its tendency toward either apocalyptic, declensionist narratives or utilitarian, anthropocentric assessments of the human ability to shape the planet. Heise summarizes these wide-ranging debates with a look at optimistic speculative fiction reshaping perspectives on humanity as one of many kinds of agents acting on the Earth's environmental systems.

The first two articles present specific historical analyses, one taken from the nineteenth century, the other from the twentieth, thereby offering concrete methodologies for work in the environmental humanities. Ette highlights Alexander von Humboldt's role for ecological thinking in Europe and more broadly. As a scientist writer whose "nomadic" and aesthetic practices provide an early model for ecological thinking, Humboldt focuses on how natural systems—fluvial, botanical, mountainous—are interwoven and interconnected. Humboldt's own thinking was best evidenced, Ette documents, in the travel journals as sites of ongoing, accumulative, and creative emergence, more so even than his many famous publications such as *Cosmos*. Humboldt's travels and writings from his journeys are emblematic for an ecological practice of movement, connectivity, and aesthetic weave that Ette labels "nomadic" thinking and knowledge.

With a postcolonial analysis of Bernhard Grzimek's wildly popular work on Africa, Thomas Lekan advances "the globalization of environmental *Kulturkritik*." He avoids the universalizing tendencies common to certain aspects of both humanism and posthumanism by carefully historicizing "the meanings and sociopolitical significance of both 'ecology' and 'humanism' in the context of post–World War II German and European societies." His article studies the significant impact of Grzimek's documentaries, television pro-

54. Ette, "Literature as Knowledge for Living," 991.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

grams, books, and efforts to create national parks in Africa on German awareness of environmental issues, but gives equal attention to how Grzimek also claimed that the African lands were "common property" of the world—but not of the people residing there. Though Grzimek's ecological efforts for Africa created "a global environmental imaginary," this provided concrete "rights" neither for animals nor for human ecologies outside the Euro-American path to "development."

The next two articles delineate how discursive strategies for negotiating our rapidly changing environment construct communicative or aesthetic codes that encompass or exclude particular ecological issues. Hannes Bergthaller uses systems theory to explore how ecological posthumanism's efforts to document our "embeddedness" are based on conceptualizations that, in fact, remain unwittingly beholden to the Enlightenment's optimistic belief in our ability to create meaningful epistemological systems that will guide our rational behavior. Using the work of Hans Blumenberg and Niklas Luhmann, Bergthaller demonstrates not only that anthropocentricism is inevitable but that human evolutionary success emerges from our very ability to keep our environmental dependency oblique to ourselves so as to maintain at least a sense of distance and thus of our own agency.

Konrad Ott's point of departure is Johann Gottfried Herder's concept of humanism and his critique of Kant's pure and practical reason. Humanism, Herder asserts, evolves from historically situated challenges and experiences and has to be learned within human history; it is an open concept that can be enriched over time. Values, obligations, and attitudes that can be derived from environmental ethical discourse may become a new augmentation to contemporary humanism. According to widespread opinion, however, an anthropocentric environmental ethics is "shallow" compared to "deep" ecological approaches that attribute inherent moral value to all living beings or to nature as such. This article argues that anthropocentrism can be ethically deep in its own right if the axiological dimension is richly textured and if obligations to other humans with respect to natural goods are taken seriously. In "deep anthropocentrism," the idea of being human is transformed and the ability to enjoy nature and to foster a concern for nonhuman life takes center stage. The eudemonic value of nature, Ott argues, is rooted in the fact that nature invites us to practice the acceptance of becoming and decaying; eudemonic value concepts thus form an indispensable bridge between human self-reflection and social-environmental praxis.

The subsequent three studies provide close readings of central themes in German literature, showcasing the potential of a literary criticism informed by

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

an awareness of the ecological dimensions of the human individual and social life and testing whether, in a time of environmental degradation, "the function of fiction" is still—as Paul Ricoeur claims—to serve "as a laboratory of thought-experiences."[55] Moving from a contemporary reflection on space and place through a late nineteenth-century realist engagement with natural disaster, this section returns the reader to the epistemic shifts under scrutiny in Heise's article with a reflection on Goethe's narrative dramaturgy of future.

Axel Goodbody situates Jenny Erpenbeck's 2008 novel *Heimsuchung* in the context of an "environmental turn" in the vexed history of *Heimat* in German intellectual history. Over the last forty years *Heimat* has been reestablished as a key cultural concept—redefined in the age of migration, globalization, and a growing concern for the natural environment. This article suggests that if ecocriticism remains a largely unexplored field in the German-speaking world, it is partly because issues aired in recent ecocritical debates elsewhere have tended, under the Frankfurt School's influence, to be contested in other disciplines in Germany, such as sociology, anthropology, and philosophy. Erpenbeck's imaginative reconstruction of the history of a lakeside summerhouse in the hinterland of Berlin over the last century reaffirms *Heimat* feeling without concealing the injustice and suffering it has led to in the past. It lays down the challenge of creating a *Heimat* in the future, in the spirit of a revised or revisited humanism—embracing gender, class, and ethnic justice, and an ethic of environmental stewardship.

Kate Rigby examines the potential role of narrative fiction in enhancing disaster preparedness in the present context of escalating environmental crisis with respect to Theodor Storm's novella *Der Schimmelreiter.* The multiple narrative frames of this tragic tale foreground the ineluctable force of viewpoint in any narrative performance. *Der Schimmelreiter* encapsulates an onto-story of nature and culture that challenges humanist assumptions about "man" and "nature" by disclosing the limits of rational human mastery. Categorizing events like the catastrophic sea surge as "natural disasters" impedes our ability to recognize the human contribution to their genesis. Modern narrative fiction, Rigby shows, provides an imaginative space within which both the complex causality of various kinds of hybrid natural-cultural disasters and a range of different modalities of human response to them can be explored.

The final article engages literature as a "laboratory of thought-experiences" that enacts environmental thinking as a format looking toward the future rather than describing specific ecological issues. Markus Wilczek offers

55. Ricoeur, *Temps et récit*, 258.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

a model of such thinking based on Goethe. In a study of narrative's potential to provide structures of sustainable thinking, Wilczek links Goethe's "Märchen" with the MIT *Humanscale* project on aligning the human technological sphere with the physical environment. Goethe's work for the Weimar Hydrologic Engineering Commission provided a future-oriented framework considering potential risks that Wilczek sees as a map for the fairy tale's otherwise seemingly enigmatic movement toward a final restoration of a new king. Rather than address ecology directly or in a proto-ecological sense, Goethe's tale portrays a "pragmatic partnership" between nature and human beings. Its narrative mode—the "sustainable text" rather than the "open text"—can be read as an attempt to overcome the dilemmas of modernity and exercise a reflexive modernity *avant la lettre*.

Imagination here emerges, as Gaston Bachelard claims, "not, as its etymology suggests, [as] the faculty for forming images of reality; it is the faculty for forming images which go beyond reality, which *sing* reality. It is a superhuman faculty."[56] We are all, humanists and posthumanists alike, called on to exercise this superhuman faculty.

References

Agamben, Giorgio. 2004. *The Open*. Stanford, CA: Stanford University Press.

Alaimo, Stacy. 2010. *Bodily Natures: Science, Environment, and the Material Self.* Bloomington: Indiana University Press.

Bachelard, Gaston. 1983. *Water and Dreams: An Essay on the Imagination of Matter.* Dallas, TX: Pegasus Foundation.

Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press.

Beck, Ulrich. 1986. *Risikogesellschaft: Auf dem Weg in eine andere Moderne*. Frankfurt am Main: Suhrkamp.

———. 2010. "Klima des Wandels: Wie wird die grüne Moderne möglich?" In *KlimaKulturen: Soziale Wirklichkeiten im Klimawandel*, edited by Harald Welzer, Hans-Georg Soeffner, and Dana Giesecke, 33–48. Frankfurt am Main: Campus.

Böhme, Gernot. 1989. *Für eine ökologische Naturästhetik*. Frankfurt am Main: Suhrkamp.

———. 1995. *Atmosphäre: Essays zur neuen Ästhetik*. Frankfurt am Main: Suhrkamp.

Bonneuil, Christophe, and Jean-Baptiste Fressoz. 2013. *L'événement anthropocène*. Paris: Seuil.

Buchanan, Brett. 2008. *Onto-Ethologies: The Animal Environments of Uexküll, Heidegger, Merleau-Ponty, and Deleuze*. Albany: State University of New York Press.

Cassirer, Ernst. 1962. *An Essay on Man: An Introduction to a Philosophy of Human Culture*. New Haven, CT: Yale University Press.

56. Bachelard, *Water and Dreams*, 16.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

Chakrabarty, Dipesh. 2009. “The Climate of History: Four Theses.” *Critical Inquiry* 35, no. 2: 197–222.
———. 2009. “Humanism in a Global World.” In *Humanism in Intercultural Perspective*, edited by Jörn Rüsen and Henner Laass, 23–36. Bielefeld: Transcript.
Crutzen, Paul, and Eugene F. Stoermer. 2000. “The Anthropocene.” *Global Change Newsletter* 41: 17–18.
Derrida, Jacques. 1987. “Geschlecht II: Heidegger’s Hand.” In *Deconstruction and Philosophy: The Texts of Jacques Derrida*, edited by John Sallis, 161–96. Chicago: University of Chicago Press.
———. 2008. “The Animal That Therefore I Am (More to Follow).” In *The Animal That Therefore I Am*, edited by Marie-Louise Mallet, translated by David Wills, 1–51. New York: Fordham University Press.
de Waal, Frans, and Peter L. Tyack, eds. 2003. *Animal Social Complexity: Intelligence, Culture, and Individualized Societies*. Cambridge, MA: Harvard University Press.
Ette, Ottmar. 2010. “Literature as Knowledge for Living, Literary Studies as Science for Living.” *PMLA* 125, no. 4: 977–93.
Evernden, Neil. 1992. *The Social Creation of Nature*. Baltimore, MD: Johns Hopkins University Press.
Fromm, Erich. 1955. *The Sane Society*. New York: Holt, Rinehart and Winston.
———. 1976. *To Have or to Be?* New York: Harper and Row.
Goebel, Eckart. 2012. “The Sublimation of Nature: Theodor W. Adorno.” In *Beyond Discontent: “Sublimation” from Goethe to Lacan*, 193–224. New York: Continuum.
Gordon, Peter E. 2010. *Continental Divide: Heidegger, Cassirer, Davos*. Cambridge, MA: Harvard University Press.
Gould, Stephen Jay. 1993. “The Golden Rule—a Proper Scale for Our Environmental Crisis.” In *Environmental Ethics: Divergence and Convergence*, edited by S. J. Armstrong and R. G. Botzler, 310–17. New York: McGraw-Hill.
Grene, Marjorie. 1974. “People and Other Animals.” In *The Understanding of Nature: Essays in the Philosophy of Biology*, 346–60. Dordrecht: Reidel.
Haraway, Donna. 2003. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Chicago: Prickly Paradigm.
———. 2009. “A Cyborg Manifesto.” In *Science Fiction: Stories and Contexts*, edited by Heather Masri, 455–75. New York: Bedford.
Hayles, N. Katherine. 1999. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press.
Heidegger, Martin. 1993. *Sein und Zeit*. Tübingen: Niemeyer.
———. 2004. *Die Grundbegriffe der Metaphysik*. Vols. 29–30 of *Gesamtausgabe*. Frankfurt am Main: Klostermann.
———. 2008. “Letter on Humanism.” In *Basic Writings*, edited by David Farrell Krell, 213–65. London: Harper.
Heise, Ursula K. 2016. *Imagining Extinction: The Cultural Meanings of Endangered Species*. Chicago: University of Chicago Press.
Høeg, Peter. 1996. *Borderliners*. London: Harvill.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

Iovino, Serenella, and Serpil Oppermann. 2012. "Theorizing Material Ecocriticism: A Diptych." *Interdisciplinary Studies in Literature and the Environment* 19, no. 3: 448–75.

Jonas, Hans. 1979. *Das Prinzip Verantwortung: Versuch einer Ethik für die technologische Zivilisation*. Frankfurt am Main: Suhrkamp.

———. 1984. *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*, translated by Hans Jonas and David Herr. Chicago: University of Chicago Press.

Klingan, Katrin, Ashkan Sepahvand, Christoph Rosol, and Bernd Scherer, eds. 2015. *Textures of the Anthropocene: Grain, Vapor, Ray*. Cambridge, MA: MIT Press.

Langer, Susanne K. 1953. *Feeling and Form*. New York: Scribner's.

Latour, Bruno. 2004. *Politics of Nature: How to Bring the Sciences into Democracy*, translated by Catherine Porter. Cambridge, MA: Harvard University Press.

Malkmus, Bernhard. 2015. "Naturgeschichten vom Fisch, oder Die Angst vor dem Anthropozän." *Scheidewege* 45: 183–200.

Margulis, Lynn. 1998. *Symbiotic Planet: A New Look at Evolution*. New York: Basic.

Mayr, Ernst. 1997. *This Is Biology: The Science of the Living World*. Cambridge, MA: Belknap Press of Harvard University Press.

Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press.

Peterson, Keith. 2010. "All That We Are: Philosophical Anthropology and Ecophilosophy." *Cosmos and History: The Journal of Natural and Social Philosophy* 6, no. 1: 91–113.

Plessner, Helmuth. 1982. "Der Mensch als Lebewesen." In *Mit anderen Augen*, 9–62. Stuttgart: Reclam.

Plumwood, Val. 2006. *Environmental Culture: The Ecological Crisis of Reason*. London: Routledge.

Poirié, François. 1987. *Emmanuel Lévinas: Qui êtes-vous?* Lyon: La Manufacture.

Rabinbach, Anson. 1997. *In the Shadow of Catastrophe*. Berkeley: University of California Press.

Radkau, Joachim. 2011. *Die Ära der Ökologie: Eine Weltgeschichte*. Munich: Beck.

Ricoeur, Paul. 1985. *Temps et récit*. Vol. 3, *Le temps raconté*. Paris: Seuil.

Rigby, Kate. 2011. "Gernot Böhme's Ecological Aesthetics of Atmosphere." In *Ecocritical Theory: New European Approaches*, edited by Axel Goodbody and Kate Rigby, 139–52. Charlottesville: University of Virginia Press.

Santner, Eric. 2006. *On Creaturely Life: Rilke, Benjamin, Sebald*. Chicago: University of Chicago Press.

Schwägerl, Christian. 2010. *Menschenzeit: Zerstören oder gestalten? Die entscheidende Epoche unseres Planeten*. Munich: Riemann.

Schweitzer, Albert. 1991. *Die Ehrfurcht vor dem Leben—Grundtexte aus fünf Jahrzehnten*. Munich: Beck.

Skidelsky, Edward. 2008. *Ernst Cassirer: The Last Philosopher of Culture*. Princeton, NJ: Princeton University Press.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024

Soper, Kate. 2012. "The Humanism in Posthumanism." *Comparative Critical Studies* 9, no. 3: 365–78.

Sullivan, Heather I. 2014. "The Ecology of Colors: Goethe's Materialist Optics and Ecological Posthumanism." In *Material Ecocriticism*, edited by Serenella Iovino and Serpil Oppermann, 80–96. Bloomington: Indiana University Press.

Trawny, Peter. 2014. *Irrnisfuge: Heideggers An-archie*. Berlin: Matthes and Seitz.

Uexküll, Jakob von. 1909. *Umwelt und Innenwelt der Tiere*. Berlin: Springer.

———. 2010. *A Foray into the Worlds of Animals and Humans: With* A Theory of Meaning, translated by Joseph D. O'Neil. Minneapolis: University of Minnesota Press.

Weber, Max. 2001. *The Protestant Ethic and the Spirit of Capitalism*, translated by Stephen Kalberg. Chicago: Fitzroy Dearborn.

Welzer, Harald, Hans-Georg Soeffner, and Dana Giesecke, eds. 2010. *KlimaKulturen: Soziale Wirklichkeiten im Klimawandel*. Frankfurt am Main: Campus.

Westling, Louise. 2006. "Literature, the Environment, and the Question of the Posthuman." In *Nature in Literary and Cultural Studies: Transatlantic Conversations on Ecocriticism*, edited by Catrin Gersdorf and Sylvia Mayer, 25–47. Amsterdam: Rodopi.

Wolfe, Cary. 2010. *What Is Posthumanism?* Minneapolis: University of Minnesota Press.

Zalasiewicz, Jan. 2008. *The Earth after Us: What Legacy Will Humans Leave in the Rocks?* Oxford: Oxford University Press.

Downloaded from http://dup.silverchair.com/new-german-critique/article-pdf/43/2 (128)/1/446473/ddngc_43_2_128_01Malkmus_Fpp.pdf by guest on 24 April 2024