

Introduction

Penny Harvey, Christian Krohn-Hansen, and Knut G. Nustad

Anthropos and Anthropology

The clearance of rain forests for soy and cattle production, the destruction of mountains to get at minerals, billions of microscopic plastic beads in the ocean, and a climate that is becoming increasingly warmer—we are daily reminded of the destructive effects of modern industrialized societies. These effects have profoundly shaped the planet and, according to recent claims, will leave a record in the geological strata. Some have proposed that they amount to a new geological epoch, the age of humans, or Anthropocene, set to replace the Holocene. The claim is contentious, and at the time of writing, the Submission on Quaternary Stratigraphy has yet to rule on whether such a change in nomenclature is justifiable. But whatever one thinks of the term, it points to a set of challenges and concerns that have huge implications for how we think the human (*anthropos*), approach the material, and imagine the possibilities for politics.

These challenges, rather than the term itself, are the key concerns of this present volume. Dipesh Chakrabarty (2009) argues that the environmental conditions that trigger discussion of the Anthropocene destabilize humanist intellectual projects in an overt challenge to the primacy of the human. This “decentering” of the human has roots in poststructuralism but also resonates with contemporary debates in feminism, queer theory, postcolonialism, multispecies approaches, new materialisms, science and technology studies, posthumanism, and the so-called ontological turn.¹ There are many important differences between these approaches, but they all both call

into question universalist notions of human being and explore the limits of human agency. As anthropologists, we are similarly invested in a critique of liberal humanist assumptions. Our contribution in the present volume is to question how “problems” configured beyond the human scale inflect understandings of the human, and of human capacities to respond to the dramatic changes in the ecological matrices that constitute the possibilities for livelihoods and for the coexistence of life forms. In this respect the approach of this volume engages the recent turn to the nonhuman (Grusin 2015) in a specifically anthropological way. Acknowledging the force and creativity of those broadly philosophical genealogies that have generated the powerful critique of liberal humanist subjectivity, our focus is more squarely on the understandings of those who never were committed to such a position.

We propose that an ethnographic mode of attention to everyday practices offers a fruitful foundation for discussion of these issues. Ethnography allows us to articulate a politics that begins with the acknowledgment of human-material entanglement, that assumes the simultaneous importance of both planetary ecologies *and* local historical conditions, that approaches research as an attentiveness to process rather than to discrete “research objects,” and that fosters an awareness of the constitutive presence of uncertainty. Ethnography, we argue, holds out the possibility for articulating new political perspectives on the rich and varied registers of lived experience. The Anthropocene is one such register. Amelia Moore (2016, 27) notes that the Anthropocene configures a “contemporary problem space” that anthropology is well placed to address. In particular, she suggests that ethnographic methods and orientations can be deployed to keep track of how the Anthropocene is framed as a problem and how new (authoritative and scientifically authorized) arguments about collectivity and responsibility are deployed in the urgent rush to respond to perceived threats to human interests. Bruno Latour (2014) goes so far as to argue that the naming of the Anthropocene is a gift to anthropology, as it marks a shift away from the modern paradigms that have dominated mainstream social and natural sciences, particularly those separations that constitute the key disciplinary divisions between natural and social worlds, science and politics, nature and culture.

These reconfigurations are intellectual challenges, but also deeply political ones. The problem space configured by the Anthropocene affects the lifeworlds that we notice and those that we do not notice. Marisol de la Cadena’s neologism the “anthropo-not-seen” (this volume) refers to configurations of the human that focus on embodied immersion in material worlds rather than on species being or on human cognitive understandings of a material

world from which we stand apart. A reflexive understanding of “anthropos” affects how we describe, conceptualize, and engage human and other-than-human sociality, the entanglements and interdependencies as well as the differences and ultimately the indifference that life-forms might have for each other.

While the idea of the Anthropocene provokes us to think through the challenges ahead, it also comes with clear limitations and problems. Robert Macfarlane, in a 2016 review of a range of recent publications, summarizes what he sees as the three main objections to the idea of the Anthropocene: namely, that it is arrogant, universalist, and capitalist-technocratic.² It is *arrogant* because it resolutely places humans as the central force of historical change and thereby continues the disregard for other-than-human life that has contributed so centrally to the current ecological crises, and *universalist* because it poses humanity as species, a homogeneous universalizing force, and thereby overlooks historically constituted processes of differentiation that produce entrenched social divisions (of race, class, gender, sexuality, age, and many more) and ignores the imperial histories that have produced the extremes of wealth and poverty that severely hamper efforts to confront our current environmental conditions. Humans are differently implicated in creating these problems, and the poor are disproportionately affected by them. Indeed, some argue that the Anthropocene might be more appropriately labeled the Capitalocene (J. Moore 2016). Last, it is *capitalist-technocratic* because too many arguments about the Anthropocene reduce global history to a set of technological inventions (the taming of fire, the combustion engine, nuclear power) that are presented as the real drivers of global history. This position, as critics points out, easily leads to a belief in the value of technocratic fixes and to the elaborate, all-consuming “solutions” of geoengineering.³

How, then, can we engage the challenges of the Anthropocene without embracing arrogance, universalism, and naive materialism? There is more at stake here than getting our nomenclature right. How we meet these challenges analytically has profound implications for how we meet them politically. The terms of engagement configure the possibilities for response. We have retained the core dichotomy of “anthropos” and “the material” in the title of this volume to signal the challenge and the politics implied by the collapse of this opposition. The gift to anthropology that Latour refers to is of course also a challenge, as theorists of the gift have long taught us to expect. Gifts create relationships and expectations of return (Mauss [1925] 1990). However, we contend that anthropology has much to contribute to

wider debates, not least to the ways in which ethnographic research connects us to perspectives and possibilities that are often forgotten, sidelined, or ignored altogether. In what follows we address the three core challenges of anthropocentrism, universalism, and capitalist-technocratic determinism, highlighting some of the ways in which we might think beyond these strictures. In brief, the argument is as follows: First, we acknowledge the need to find ways of addressing structural effects that we refer to with terms such as “global capitalism” and “colonialism” without turning complex and heterogeneous forces into singularities or falling prey to naive materialism. Second, we respond to the limits of anthropocentrism (see, for example, Bennett 2010; Braun and Whatmore 2010; Masco 2014), following Chakrabarty’s argument that the idea of the Anthropocene invalidates any distinction between natural and human history.⁴ This raises the question, debated for decades now, of how we conceive of human and nonhuman agency. Here, we take seriously the call to think human history and natural history together and to build conceptual and analytic repertoires that neither erase the human nor render humanity as an abstract category. Third, the process of thinking natural and social history together has implications for how we conceive of diversity. Collapsing boundaries between natural and human history undermines any notion of universal man. And yet the alternatives offered by the new theoretical paradigms of recent years (mentioned above) have all become somewhat mired in controversy as new dichotomies emerge and new relations between parts and wholes are configured. We cannot solve this problem, but we can look more closely, and more ethnographically, at how our descriptive and analytic practices conceive parts and wholes (or indeed collapse that distinction altogether), as a way of keeping open an unsettled space that allows us to remain attentive to a multiplicity that does not settle, and to uncertainties that are never simply resolved.

The Value of Ethnographic Methods

In what follows we look in more detail at the value of those ethnographic methods that pay as much attention to processes of formation as they do to particular cultural or social forms. Anthropology brings a disciplinary perspective founded on long-term fieldwork and participant observation.⁵ Ethnographic work has long shown its capacity to establish a critical relationship to the modernity of which it is a part. In particular, we acknowledge the need to address the ways in which change is apprehended both within and beyond the modern telos. Thus, for example, the group of scholars who

became known, in the 1950s and 1960s, as the Manchester school deployed ethnographic methods to make sense of the social transformations that they associated with the industrialization of southern Africa. Recognizing that ethnography as it had been developed until then, as a route to describing the interconnectedness of the social institutions of a particular society, was not up to the task, they argued for using case studies of ongoing social processes. They studied legal proceedings in the so-called native courts and followed land disputes, the opening of a bridge in Zululand, or industrial actions on the mining compounds, and, by so doing, they aimed to elicit and describe the structural forces that gave shape to these unfolding cases (for example, C. Mitchell 1956, 1969; Gluckman 1958; Gluckman and Southall 1961; Van Velsen 1967; Epstein 1992). By referring to these studies as “extended cases,” they highlighted the temporal dimensions of these unfoldings. An ethnographic description had little analytic value until the case was reinserted into the historical process from which it was abstracted.

Ethnographic case studies also have another quality that is important for our task. Ethnographic descriptions, even those that Tim Ingold (2014) accuses of turning lived unfolding lines into objects, have always operated across the boundaries of modern classifications (of human and natural worlds, or humans and nonhuman beings). In many ways this boundary transgression has been the *raison d'être* of classic anthropology (in that it is a very modern, reflexive critique of the modern!).⁶ E. E. Evans-Pritchard (1940), for example, in his study of the Nuer, described the ecology of the Sudan and the Nuers' conception of time and temporality as deeply intertwined and their relationship with their cattle as symbiotic. “It has been remarked,” he wrote, “that the Nuer might be called parasites of the cow, but it might be said with equal force that the cow is a parasite of the Nuer, whose lives are spent in ensuring its welfare” (36).

This claim for the transformative potential of ethnography might seem surprising to those who think of the approach as resolutely small scale and thus an unlikely go-to method for addressing global problems. However, in recent years several anthropologists have stressed the importance of looking at ideologies of scale, and particularly at those assumptions of proportionality and extension that render the particular of little relevance to more general problems (Strathern 1991; Green 2005; Ong 2008; Corsín Jiménez 2010; Tsing 2015).

Anna Tsing has been a key voice calling for systematic ethnographic attention to the possibilities and the obfuscations of scale making as a social practice. Tsing suggests that we should look both at projects of scale

making—that is, the specific practices that distinguish and enact (bring into being as lived realities) localities, nations, regions, and planetary entities—and at “ideologies of scale,” by which she is referring to unquestioning assumptions about how we perceive the relative importance or relevance of particularity: how we perceive what is “big,” “extensive,” or “important.” “If we want to imagine emergent forms of resistance, new possibilities, and the messiness through which the best laid plans may not yet destroy all hope, we need to attune ourselves to the heterogeneity and open-endedness of the world. This is not, however, an argument for ‘local’ diversity; if anything, it is an argument for ‘global’ diversity and the wrongheadedness of imagining diversity—from an unquestioning globalist perspective—as a territorially circumscribed, ‘place-based,’ and antiglobalist phenomenon” (2000, 352).

The issue is not about choosing which scale to endorse but rather about thinking through the particular holisms invoked by overarching concepts such as capitalism, neoliberalism, globalization, and of course the Anthropocene, as well as their effects. Such concepts are ill equipped to deal with the challenges of planetary environmental futures because they can never grasp the particular grounded historical specificity of actual circumstances. Instead, they offer a temporary means of drawing diverse situations into a comparative frame.

There is thus a politics at stake in our juxtaposition of anthropos and the material in the sense that we understand that ethnographic interventions, such as those included in this volume, have the capacity to disrupt established ways of thinking and the potential to exemplify alternative ways of configuring the very conditions of human existence from the perspective of their participation in complex, emergent material worlds. Classic political anthropology has looked at how relations of power are enacted and conceptualized, how particular social orderings are created and reproduced, asking what forms of politics (struggle), power (force), authority (legitimacy), and government (institutional arrangements) are operating in particular times and places (Krohn-Hansen 2015). However, we are not simply thinking of providing instances that might expand the horizons of those who think from the provincial heartlands of global policy making. We also want to address the problems of legibility that have sometimes impeded the take-up of ethnographic work. To this end, we have structured the volume around three sections, each displaying a particular way in which we might approach the entanglements of anthropos and the material. In the first section, “Materializing Structures,” we draw attention to structuring forces to demonstrate how ethnographic exploration can open new perspectives on globalizing

processes. The second section, “Material Potential,” presents four analyses that emerge from an ethnographic focus on material relations and material vitality, emphasizing the interplay between material potentiality and human agency. The third and final section, “Material Uncertainties and Heterogeneous Knowledge Practices,” presents three analyses that are especially preoccupied with the instability of things and the material conditions of contingency, uncertainty, and the production of knowledge.

Part I: Materializing Structures

There is much brilliant research to build on as we work to think beyond capitalist-technocratic determinism without denying the global force of the military-industrial complex, global energy politics, and the vested interests that shape global media circulations. Timothy Mitchell (2013) has provided one of the most celebrated accounts in recent years in his work *Carbon Democracy: Political Power in the Age of Oil*, which traces the complex historical connections among hydrocarbon energy systems, industrial expansion, contemporary democracy, and American forms of imperialism. The production and the use of nuclear energy are also embedded in the conditions of modern democracy and the forms of imperialism on which it depends. According to Philip Johnstone and Andrew Stirling (2016), for example, it is the United Kingdom’s continued ability to maintain a level of independent national capabilities to construct and operate nuclear-propelled military submarines that drives the nation’s *civil* nuclear politics. Scholars such as Mitchell, Johnstone, and Stirling critically examine the histories that track the emergence and reproduction of specific economic-military sectors (the political economy of coal and oil and of nuclear power). Their works make visible the global and transnationalized political contours in which contemporary lives, both human and nonhuman, are lived.

But there were anthropologists who well before Mitchell, Johnstone, and Stirling followed particular materials to build accounts of imperial formations or globally extended structures of power. In his pioneering *Sweetness and Power: The Place of Sugar in Modern History* (1985), Sidney Mintz wrote a history of sugar, a tropical substance. His study focused on two processes through which sugar became a commodity: colonial production and capitalist circulation and consumption. Specifically, Mintz was able to demonstrate how political, economic, and cultural life in an industrializing England, then the heart of empire, changed as a consequence of shifts in the West Indian colonies. The book narrates how the growing supply of sugar to Europe

contributed to new forms of European consumption, including wholly new meanings attached to sugar as, over time, it went from being a luxury commodity consumed only by elites to becoming a taken-for-granted element in the everyday life and diet of the masses.

But little of this would have been possible had sugar not been readily available because of its suitability for plantation production and for long-distance trade. If we wish to investigate and understand how forms of life and politics are affected and shaped through engagements with, and uses of, specific materials, we first need to ask why and how (and sometimes where) the materials in question became available in the first place. It is thus essential to preserve a deep interest in forms of large-scale political and economic history and in contemporary global capitalism as a structuring force. As Mintz puts it, “Before the rich and powerful who first ate sugar in England could give it new meanings, they had to have it” (1985, 167). As in the case of global energy politics, the narratives of the emergence and the transformations of contemporary capitalism and global trade have enjoyed huge prominence, and the subdisciplines of economic anthropology and material anthropology have offered many examples and insights into structural forces that drive the production, distribution, and consumption of commodities and things (see, for example, Appadurai 1988; Miller 1987, 2005, 2008, 2010; Coronil 1997; Yanagisako 2002, 2013; Guyer 2004; Fisher and Downey 2006; Martínez 2007; Gregory 2014; and Ferguson 2015). The growing body of work on digital anthropology and social media also signals the importance of recognizing the many ways in which information and data are now integral to these circulations (see, for example, Boellstorff 2008; Miller 2012; Boellstorff and Maurer 2015; Matthews and Barnes 2016; and the discussion of bitcoin by Keir Martin in this volume—the list could proliferate in many directions). The key point is that if we want to grasp the histories and the futures of, for example, specific landscapes, geographies, roads, wastelands, or pollution, we need this Mintz-like preoccupation with how power is constituted in particular imperial histories and globally extended capitalist networks (Baca, Khan, and Palmié 2009; Tsing 2009, 2015; Stoler 2013; Masco 2014; Harvey and Knox 2014; Gordillo 2015; Harvey, this volume; Nustad, this volume).

Such networks, and their material effects, are also a key interest of Michael Taussig. Taussig’s various works on human histories of resource extraction and commodity trade (1980, 2004, 2008) reveal an anthropologist who, in many ways, directs the same attention to the properties of specific materials and the vibrancy of matter as he does to the dynamics of world

history and the forces of capitalism. His ideas are brilliantly illustrated in his essay “Redeeming Indigo” (2008), which seeks to reconfigure our awareness of what it took to bring the color blue into our everyday material world. Taussig is interested in the hidden and forgotten histories of materials and things, and the capacities of these histories to shock when they are revealed. The reason that the histories of mundane substances and things have this capacity to surprise, disturb, or provoke scandal is quite simply that they so often contain incredible, frightening, or vicious and cruel labor histories.

The story of the color blue tells of Bengali indigo workers in seventeenth- and eighteenth-century India. Taussig describes the routine violence or dehumanization that is associated with so many (colonial and postcolonial) labor relationships. These workers, he writes, wore “masks with only the eyes exposed on account of the smell, while those close to the work drank milk every hour, ‘this being a preservative against the subtlety of the indigo.’ The workers would spit blue for some time after work” (2008, 7). Such histories of capital and labor do not belong only to the past, a vanished time. Many, perhaps most, of our things and materials—from tea to paint to plastic to smartphones—have the capacity to shock because these things that are mundane in some places are directly connected to dramatic and violent social and material relations in other places.

Some global material-social histories appear to especially demand attention today. Many anthropologists today seek to chart and examine the networks or structures that have given shape to the contemporary world’s various forms of energy politics (Masco 2006; Behrends, Reyna, and Schlee 2011; Boyer 2014; Howe and Boyer 2015, 2016; Campbell, Cloke, and Brown 2016), large-scale plantations and forms of agroindustry (Striffler and Moberg 2003; Tsing 2004; Hetherington 2013), open-pit mining activities (Rolston 2013; Kirsch 2014; Perreault 2015), vast infrastructure projects (von Schnitzler 2013; Fabricant and Postero 2015; Schwenkel 2015), shifts in warfare technologies and uses of political violence (along with their effects in terms of sufferings, ecological ruinations, inequalities, and national and international migration patterns; Finnström 2008; D. Pedersen 2013; Hinton and Hinton 2015; Lyons 2016), and the digital revolution with its new types of connectivity, social media, and political practices (Mazzarella 2010; Juris 2012; Poggiali 2016).

Global and transnational configurations are always in the making, constantly shifting. They should be viewed as power-laden fields and as continually emergent political formations and practices. They are the outcome of myriads of small and large negotiations and struggles. For example, Stuart

Kirsch (2014), in his book on the contemporary transnational mining industry, argues that what he describes as the dialectical relationship between large corporations and their critics (representatives of local communities, indigenous populations, social movements, global nongovernmental organizations, and so on) has become “a permanent structural feature” of today’s capitalism. He goes on to note that the underlying dilemmas associated with mining and other kinds of capitalist production and consumption are rarely entirely resolved; instead, they can only be renegotiated in new forms (3), hence the always shifting relations, alliances, and battles.

One reason a set of ecologically destructive material-social practices, or dominant political projects, can be so hard to fight or change has to do with the force of sentiments and desire, or affect, among humans (Williams 1977; Masco 2014; Flikke, this volume). Historically constituted affective structures shape human motivations and provoke and sustain powerful feelings and needs. William Mazzarella (2009, 298–299), who sees affect as structurally integral to modernity, argues that therefore “any social[-material] project that is not imposed through force alone must be affective in order to be effective.” Kath Weston (2012, 2017) has worked with this insight in her investigations of our contemporary world’s political ecologies. She maintains that far too many engagements with climate change and potential ecological disaster “incorporate an affective stance that allows people to live with apparent contradictions, reassuring them that they can poison the world without limit even as they recognize that a limit must be out there somewhere and suturing them to ecological demise even as they work against it” (2012, 429). Her programmatic essay “Political Ecologies of the Precarious” examines the part played by Fordism’s perhaps most iconic material object, the car, in fostering this affective stance “by bringing ‘the masses’ into an intimate, visceral engagement with the products of synthetic chemistry” (429).

While all the chapters in this volume connect their ethnographic studies to wider historical processes and transnational circulations and to the contingent forces through which such circulations affect and are, in turn, affected by the material fabrics of everyday life, three of our contributors, Marisol de la Cadena, Christian Krohn-Hansen, and Ingjerd Hoëm, focus particularly on the diverse ways in which encounters with wider structural forces unfold—and they all seek to challenge our understanding of how the political takes shape in these spaces of encounter.

De la Cadena’s chapter addresses the core paradox of our time: the simultaneous commitment to economic growth and to environmental sus-

tainability. Her description of the devastating environmental and human costs of the full-throttle extractivism that fuels the contemporary Peruvian economy quite clearly articulates a politics of contestation. However, the argument that de la Cadena puts forward is intended to unsettle such politics. She argues that liberal modern politics (“politics as usual”) is not simply ill equipped to fight this battle but systematically reproduces the exclusions and separations that it claims to struggle against. She proposes an alternative: a politics in support of the “anthropo-not-seen,” a politics that starts from the recognition that *anthropos* is neither singular nor universal. De la Cadena brings together two core strands of divergent political thinking: equivocation (after Viveiros de Castro 2004) and disagreement (after Rancière 1999). She develops the concept of equivocation to discuss the nonequivalence of human difference and the partial connections of human engagement that can form the basis for unexpected alliances between persons and groups with different ontological assumptions and orientations. Rancière’s politics of disagreement evokes a more definitive act of refusal: the refusal to acknowledge the politics of another; the refusal to accommodate. At the core of the chapter is the example of a peasant woman determined to hold her ground, to refuse the separation of nature and culture on which extractivism depends. The land that the state is seeking to expropriate is not simply hers (as property and/or as resource); it is “her,” integral to her being. To clear the ground for financial investment, the state, in turn, refuses this possibility and offers compensation in a register of equivalence that makes no sense to the woman. De la Cadena is at pains to point out that we should avoid seeing this case as an example of a dichotomy between those who separate nature from human being and those who do not. Her politics refuses that distinction. She talks, rather, in terms of excess: the peasant woman recognizes and uses idioms of ownership, and her land is property, but “not only”—land is a concept that exceeds the categories through which the state asserts its rights to control.

Questions surrounding the tensions between the structuring material-social-affective forces that support hegemonic and state power and the diversity inherent in such structures are Krohn-Hansen’s central concern. In his chapter, he challenges the singularity and the universalism of *anthropos* in a quite different way. Krohn-Hansen insists that it is key to acknowledge capitalism’s heterogeneity because it is in the spaces that exceed capital’s control that possibilities can be found for collective political action, friendship, and human concern. The chapter draws on an ethnographic study of entrepreneurial Dominican livery-cab cooperatives in New York. Unable to

break into the yellow cab market of central and lower Manhattan, Dominican migrants began working in northern Manhattan and in the Bronx, offering service to areas where the yellow cabs would not go. The livery-cab drivers formed cooperatives that instantiated familiar material conditions of entrepreneurial labor: low wages and long hours, with each driver carrying the risk of fluctuating markets and of uncertain regulatory demands. But these conditions do not sufficiently account for how these businesses work, or for why they take the form they do. The cooperatives are not simply a means of enabling work, nor are they held together solely by the payments that each member makes to the organization. The material relations that structure the working lives of these men are not abstracted from the affective relations that shape the social world of work. The cooperatives were formed using the same model as many of the Dominican voluntary associations or social clubs. They are social spaces where independence, autonomy, and specific modes of masculinity are recognized and valued, and where a passion for politics and for sport is assumed. Capitalism produces difference and makes use of difference, but it does not control the ways in which such differences become meaningful.

Krohn-Hansen's engagement with the structuring forces of global capitalism is complemented by Hoëm's chapter, which takes us to the Pacific atolls of Tokelau. Revisiting Marshall Sahlins's (1958) account of the structuring forces of sociopolitical organization, grounded in the combined material forces of landscape, technology, and resources, she interrogates the claim that these material conditions place an evolutionary ceiling on forms of political organization. Hoëm compares Sahlins's approach to the sociopolitical with Tsing's discussion of landscape as the extended material relations through which places and specific niches emerge and are sustained. This perspective is less structurally bound and more attuned to the comings and goings between the atolls, and between the atolls and other places. Here we begin to see that sociopolitical capacity is as emergent as it is structural. Tokelau is rich in resources even though it has little land and few people and, as a location, is extremely vulnerable to environmental forces. Indeed, these atolls appear for many as visible indices of climate change as the residents struggle to confront the challenges of rising sea levels, increasingly heavy storms that breach the division between sea water and the freshwater lagoon, and the consequences of economic growth and enhanced social connectivity, which feed desires for more consumer goods and ever-improving standards of living. Rising indices of poor health and the growing challenges of waste disposal are offset by the Tokelauan determination to remain where they are.

It is this third perspective that Hoëm emphasizes in her chapter. She argues that to focus solely on the material dimensions of Tokelauan life would be to miss the significance of the structuring forces of sociopolitical organization to which Sahlins draws attention. However, she argues that neither of these approaches gives sufficient emphasis to the significance of human action, the work and effort that go into creating and sustaining the networks of kin and associates through which access to resources—particularly the booming economy, which is driven by New Zealand state aid—is guaranteed. Structuring forces and material conditions are thus fundamental, but assuming agency in Tokelau is also about ensuring one's position in social networks that allow you to pass things on and, in turn, to receive from others. It is these networks that ensure Tokelauans have a place to stand.

Part II: Material Potential

The next section takes material potential as its starting point. Thinking history and landscape together is one way of connecting materializing structures to specific material formations. Recent research on ruins and ruination that explicitly starts from an interrogation of how imperial power occupies the present (Stoler 2013), or work on rubble that draws together the material, historical, and affective dimensions of debris (Gordillo 2014), serves as a useful site of connection between a focus on materializing structures and an investigation of the complex relational fields of specific object worlds. In addressing the challenge of how best to think material and human histories together, without an undue emphasis on the centrality of human agency, we could begin by acknowledging that humans necessarily engage the material, nonhuman world via their (historically and culturally varying) capacities of perception and imagination. Nevertheless, as Isabelle Stengers (2010) has argued, we can approach nonhuman agency with curiosity about how other-than-human forces “force thought” and, in so doing, extend our classical definitions of political agency. These broad discussions of material agency were the subject of the *Objects and Materials* collection (Harvey et al. 2014), which took as its starting point the “general agreement across the humanities and the social sciences that things are relational, that subject/object distinctions are produced through the work of differentiation, and that any specific material form or entity with edges, surfaces, or bounded integrity is not only provisional but also potentially transformative of other entities” (Harvey and Knox 2014, 1). This notion of agency assumes neither intention nor sentience, but it likewise does not rest with notions of cultural construction

or relativist ontology. Rather, it opens a field of political interrogation, as Stengers suggests.

In a similar way, the growing levels of attention to infrastructural formations in anthropology and in science and technology studies also connect to an interest in finding ways to interrogate material forces without assuming a separation of human and nonhuman histories, thus allowing for contingency, affect, and the specificities of relational perspectives. Infrastructures constitute the material conditions of possibility for specific modes of life, including the movements and circulations on which such lives are built. They hold a particular fascination for the ways in which they so often combine the explicit intentions of designers, engineers, and politicians with the intrinsic uncertainty of complex systems, always connecting and/or disconnecting in unforeseen ways.⁷ Ethnographic interrogations of material potential thus engage the relational capacities of the nonhuman as a complex field that embraces affective forms and meanings, feelings and desires, ideas about uncertainty and danger, ethical and moral values, and processes as well as outcomes, engagements, and separations.

The inherent tension between the material and the immaterial is another long-term preoccupation of anthropological research, which has a long tradition of scholarship that has focused on intimate encounters with the inner life of materials and things. To engage the material qualities of a nonhuman world—soils, forests, seeds, mushrooms, and the diverse flora and fauna that are constitutive of the worlds of hunters, gatherers, agriculturalists, or pastoralists—is to interact with the properties and the hidden dimensions of other living beings.⁸ Shamanic, magical, and much religious practice typically involves this quality of close human encounters with highly charged nonhuman forces and forms. It is by means of historically and culturally specific sentiments, myths, desires, rules, taboos, and rituals that humans across the world interact densely with the world of things through work, magic, and other forms of activity.

At the same time, we need a critical focus on our use of conceptual distinctions. The conceptual distinction between subject and object is, in itself, the product of particular political histories, as is the fast-growing literature on the nonhuman that has given rise to lively theoretical debates on material vitality, object-oriented ontologies, and speculative realism.⁹ Ethnographers are increasingly drawn to these discussions as they look for conceptual frames through which to explore realities that disrupt the assumptions of liberal humanism. However, anthropologists also point out that many societies, even the majority of those studied by classic twentieth-century anthro-

pologists, never did assume a clear-cut distinction between human agency and a passive object world. And in the present day, contemporary science and technology studies also constantly comes up against the limits of such distinctions in the development of artificial intelligences, nanotechnologies, and many other prosthetic devices that extend and distribute “life” beyond the pulsations of organic bodies. In both of these contexts, ready-made distinctions between subject and object become obsolete—or, at least, difficult to stabilize. Like so many other important dichotomies that we employ, more or less routinely, to shape our questions and answers, these well-worn categories can no longer be taken for granted. The ethnographic challenge is rather to identify how such distinctions are drawn, in what circumstances, and to what effect. This interest in the human capacity to live with a paradoxical awareness *and* a partial disinterest in or ignorance of other-than-human agencies is key to the ethnographic accounts we present here.

The overlap between the “nonhuman turn” and ethnographic approaches more generally emerged in the various calls from within anthropology to move away from hermeneutic or semiotically oriented studies. A focus on how humans attach meanings and emotions to objects, or project force or agency into objects, was inflected by arguments that foregrounded alternative ontologies, and the notion that other-than-human beings and “things” might “speak for themselves” (Henare, Holbraad, and Wastell 2007).¹⁰ In this volume, the chapters by Keir Martin, Marit Melhuus, Penny Harvey, and Knut G. Nustad step back from the notion that things might speak for themselves, but they also do not imagine materials as passive receptors of human intention. Studying materials in and through human worlds throws light on the interdependencies of human and other-than-human worlds that the challenges of the Anthropocene bring more sharply into focus. This brings us back to thinking natural and social history together, and the implications this has for how we conceive of diversity.

Martin’s chapter moves from a discussion of the structuring forces of material relations to a consideration of the political agency of particular material forms. The topic is money. The chapter keeps one foot in the Pacific as Martin compares the *tabu* currency of Papua New Guinea with bitcoin. New technological possibilities allow bitcoin to offer a mode of exchange that can bypass the regulatory apparatus of banking systems, and thus of state control. Central to this capacity is the immateriality of the currency, with its circulation and its credibility established entirely through histories of online transactions. However, this is not an argument for technological determinism. On the contrary, Martin argues that while the immateriality

of bitcoin could underpin a potential move to the pure market trade of the sovereign individual—anonymous and untraceable—it could also mark the beginning of a highly personalized transactional field where financial transactions could be embedded in closely monitored relationships of trust. His point is that the power of materials (and/or the condition of immateriality) to make or unmake human relations is a potential that needs always to be realized, and such realizations involve human action. The story of tabu currency follows a similar line: strings of tabu money can be divided, and there are debates as to whether it should or should not be allowed to circulate as money rather than as a ceremonial gift. The anonymity and the divisibility of the tabu strings also offer a potential that requires human action for its realization.

Melhuus is also concerned with how the potential that inheres in the materiality of reproductive substances (sperm and eggs) is limited, in practice, by specific forms of human action. The chapter has much in common with Martin's work on money. Sperm and eggs are materials that people do politics with. Central to her argument is the (technological) capacity for the detachment of reproductive substance, and the human concerns that accompany this technological possibility. The law is the structuring force, introduced in an attempt to limit the potentiality of these substances by categorizing and stipulating what can and cannot be brought into what relation. The substances are mobilized to create relationships between persons, but the social validation of such relations is central to the realization of such possibilities. Different national legislatures make different decisions at different times. Other laws concerning the rights of the child, gender equality, and limits on transactions in human substances create fields of open-ended possibility and paradoxical rulings. In Norway, for example, gay men can assume legal parentage of a child from a surrogate mother, while gay women cannot because the law stipulates the primacy of the birth mother, while sperm donation ensures legal fatherhood. In this way we can see how the state comes to inhere in the materials that might otherwise appear to exercise autonomous political agency.

Harvey's chapter on concrete and stone addresses the political dimensions of material vitality by exploring how the generative capacity of matter is engaged by state agencies, by artists, by engineers, and in everyday life. Drawing inspiration from an analysis of the processes of "grafting" through which stone structures were used to channel the vital forces of the Earth in the ceremonial architectures of the Inka state, Harvey considers the affective and material power of concrete in the modern world. In Peru, as in most

other places, concrete supports state projects of ordering and stabilization. However, ethnographic attention to the work of civil engineers and of artists reveals the intrinsic instability of this material. Concrete is soft matter, one of those materials that has long fascinated scientists interested in soft solids and material flows but also artists interested in processes of entropy and unconformity. The experiences of those whose material engagements with concrete highlight the intrinsic fluidity of matter contrast strongly with more everyday uses of concrete as a material that can be counted on to fix things in place. The chapter explores this apparent paradox. Concrete is an emergent material that comes into being through the fusion of cement (a global commodity), aggregates (locally sourced stone and sand), and water. The chapter argues that the material vitality of concrete is directly related to the inextricable combination of intrinsic and extrinsic material relations. The diverse components react together to create specific synthetic forms, but these components and the resulting forms are always embedded in more extensive material and social relations. The chapter thus seeks to intervene in debates on material agency, arguing that we can address the vitality of matter without assuming or discounting the frameworks of animism. The material vitality of concrete emerges from the coming together of political and material agency, human projects, and other-than-human forces and provides an exemplary site for a consideration of the politics of human-material relations.

Nustad's chapter broadens our discussion of materials to a wider focus on disputed environmental values in St Lucia, on the east coast of KwaZulu-Natal, South Africa. Over the course of the twentieth century, this region became an important site for industrialized agricultural production, and toward the end of the apartheid era, a concession was granted for strip-mining. Postapartheid land reformers were faced with a choice about how best to realize the value of this land. Should it be used for mining, or should it be reclaimed from industry and protected as a nature reserve, valued for its separation from industrial productivity and managed as a resource for tourism and hunting? There were opposing views. Nustad tracks the terms in which the arguments were posed, noting the tensions between the conservationists, whose arguments rested on a romantic separation of nature from human activity, and the social scientists, who disputed the intrinsic value of nature and asserted that the value of the natural world is always socially constructed. Nustad is particularly interested in the political dynamics through which the relationship between anthropos and the material is forged in this case, and the vulnerabilities that emerge—vulnerabilities that

affect the futures of specific humans and other-than-human beings. Key to Nustad's argument is a focus on the negation of preindustrial human presence in the region. The temporality of the conservation perspective erases the centuries of coevolution of human and nonhuman entities. Far from returning land to a prior state, conservation creates new relational landscapes in which rich tourists, but not local people, can reside, and in which human intervention is required to manage the emergent relationships among animals, land, and human beings. In these relationships the nonhuman world is not so much constructed as engaged by human agents, constantly pressing back against the desires to control and contain, and in turn stimulating new forms of intervention.

Part III: Material Uncertainties and Heterogeneous Knowledge Practices

Debates on the importance of the constitutive force of the nonhuman have implications for anthropology's traditional approach to human diversity and, by extension, for the ways in which researchers identify fields and objects of study. It is in this context that questions of ontological difference as opposed to cultural difference have arisen and become the subject of intense debate in recent years. At issue is a renewed discussion about the limitations of the concept of culture and the political consequences of the particular form of multiplicity that "culture" denotes.¹¹ The politics of multiculturalism posits difference as stemming from particular views on the world, the views of many cultures (understood as human constructs) on a singular world (nature). In this formulation difference appears as *sui generis* and as intrinsic to the human condition. The theory of perspectivism elaborated by Eduardo Viveiros de Castro (1998) and developed by advocates of the ontological turn (Holbraad, Pedersen, and Viveiros de Castro 2014) seeks to reverse this claim by positing the possibility that the diverse perspectives on the world are not lodged in the mind (as different ways of thinking) but in bodies (as sites of multinaturalism). Although the turn to ontology is often taken as reiterating the very sense of multiplicity that it seeks to dislodge (by the simple reversal of the nature-culture dichotomy), it is important to recover the difference that this turn could make in our attempts to rethink *anthropos* in relation to the material. The ethnographies from which the ontological approach developed have tended to be spaces of encounter where difference is marked not by mind but by bodily practice, often exemplified by the techniques of hunters or shamans (Viveiros de Castro 1998; Willerslev

2007; de la Cadena 2015; Pedersen 2011). The capacity to shift perspective from one's own body to the body of another opens radical possibilities for rethinking the terms of human relational engagement with the world. Interests in multispecies ethnographies (Kirksey and Helmreich 2010; Kirksey 2015), in embodied cognition (Toren 1999), and in the semiosis of other-than-human beings (Kohn 2013) all develop these insights in important ways.

Potential approaches to the political are also expanded by an ethnographic interest in the partiality of our engagements and understandings (Strathern 1991) and an appreciation of how human intention and human agency unfold in relations of uncertainty, systematic misunderstanding, and/or equivocation (Viveiros de Castro 1998; de la Cadena 2010). Rethinking the limits of the cultural in these ways brings us back to the foundational modern tension between parts and whole, and opens the possibility of transcending notions of singularity (more than one), without assuming an endless proliferation of difference (less than many). Despite the intensity of the debate, it is interesting to see how quite different (and sometimes overtly opposing) interventions have begun to work with this possibility. Ingold (2014), critical of the additive logics of multiculturalism and of the aggregations of the sociomaterial assemblages that characterize actor-network theory, chooses to think of life via discussions of voice rather than perspective. Vision, for Ingold, suggests a static positioning and a potential for a totalizing snapshot, picture, or view. Voice, for him, invokes what he refers to as an emergent "worlding" practice, where difference is constitutive of a whole, analogous to the ways in which a musical composition combines many parts, each discrete, yet each inflecting and inflected by the other voices (more than one and less than many). The argument is posed as a polemic, but when we look in some detail at the work of those to whom the critique is directed, we find considerable common ground. Morten Axel Pedersen (2011), for example, works with Viveiros de Castro's notion of perspectivism in his analysis of Mongolian not-quite-shamans. However, he also refers to ontology as "composition":

The ontological turn amounts to a sustained theoretical experiment, which involves a strategic decision to treat all ethnographic realities as if they were "relationally" *composed*, and, in keeping with its "recursive" ambitions, seeks to conduct this experiment in a manner that is equally "intensive" itself. This is why the ontological turn contains within its conceptual make-up the means for its own undoing: it is nothing more, and nothing less, than a particular mode of anthropological play

designed with the all too serious aim of posing ethnographic questions anew, which already appear to have been answered by existing approaches. (2012; emphasis added)

Pedersen's use of "composition" thus suggests that ontologies are relational, emergent, and open-ended in very similar ways to the musical compositions to which Ingold refers.

The diverse ways in which ontologies are engaged perhaps simply reflect the very different starting points from which anthropologists come to pose questions and to mobilize theoretical frameworks to analyze the materials they gathered in the course of their empirical investigations. The question of how to engage politics is revealing in this sense. An online section of the *Cultural Anthropology* website (Holbraad and Pedersen 2014) gathered statements about ontological politics from a range of authors. Many articulated a suspicion of political certainties and expressed a desire to disrupt or move beyond the cul-de-sac of "politics as usual." Canda (2014), for example, supports the (Deleuzian-inspired) notion of a politics of permanent differentiation and warns against the use of representations of alterity that simply reproduce identity politics in a different (ontological) guise. The key issue here, on which many agree, has less to do with an ontological turn than with the limitations of modern, multicultural politics. Canda's intervention raised the question of what an appeal to the political brings into view. The articulation of alternatives offers little advance on a bland multiculturalism until we also articulate the kinds of struggles that are in play, until we can use our engagements to describe what and/or who flourishes, under what conditions, and at what expense. In this spirit, Blaser (2014) compares the investment of science and technology scholars in the enactment of reality (i.e., in the diverse ways in which realities are shaped through specific practices), as well as anthropological investments in the possibilities of alterity. Both approaches extend the possibilities for articulating the ways in which things could be otherwise, but neither assumes to know how such outcomes might emerge. In this respect we are confronted by our methodological commitment to uncertainty. As Blaser (2014) puts it, "Figuring out where, when and how to do difference and sameness as the circumstances require is to me the key challenge of doing political ontology." Thus, despite the sometimes quite strident terms in which the debate over ontological politics is conducted, the bottom line seems to be a call for anthropologists to question the terms of their own (theoretical) certainties, not in order to remain forever in doubt, but to "slow down thought"

(Stengers 2010) and to decide which tensions are generative, which to grasp and which to refuse (Verran 2014).¹²

Finally, we must acknowledge that ethnographic writing is a mode of storytelling that carries its own political promise and transformative ambition. Michael Jackson's recent work on the politics of storytelling engages Hannah Arendt's discussion of experience as the "subjective-in-between": "The entire field of experience is what Arendt calls the 'subjective-in-between,' since existence is never merely a matter of what I or you say or do but what we say and do together, interacting, conversing, and adjusting our interests, experiences, and points of view to one another" (2013, 15).

Jackson is primarily interested in how human sociality is constituted in and through the way we produce understandings of experience through our interpersonal engagements. However, the approach could quite easily be extended to include the nonhuman in our ethnographic accounts and to fold the nonhuman into our narratives of the subjective-in-between. This move does not require us to assume any subjectivity on the part of other-than-human being. Rather, it simply acknowledges that human interactions are not confined to an exclusive interhuman domain. Human experience is thus constituted through engagements beyond the human world, and it is in this sense that agency (plans, intentions, and projections) always implies something of a launch into the unknown and opens the political to an awareness of uncertainty.

Changing modes of material attention characterize Rune Flikke's account in this volume of colonial and contemporary efforts to control the flow of air, in what Peter Sloterdijk has referred to as a "politics of air conditioning." In Victorian England air was the object of such material politics, and efforts to control the flow of air as a means to prevent the spread of diseases such as cholera had clear material effects on urban design. "Miasma" was the noxious and contagious atmosphere emanating from dirt, rotting matter, and the bodies of the poor. Victorian settler communities took their fear of miasma to Africa, where a concern with air quality and the flow of air underpinned early segregation laws. Flikke's contemporary ethnography of Zulu Zionists in an African township on the outskirts of the South African city of Durban maps the enduring effects of these previous understandings of permeable bodies and circulating winds. Now reframed within the contours of sickness and healing, powerful winds are sought out by patients looking to counteract the negative bodily effects of other bodily boundary transgressions. Winds are sources of disease and of health in a politics of air conditioning that moves intangible substance across bodily membranes, carrying and channeling air, smoke, and breath. Noting that air is largely

absent from contemporary discussions of the politics of matter, Flikke argues that social theory needs to foster a greater awareness of atmospheric forces and the modes of air conditioning that structure social worlds. Human experience emerges as an engagement with fluidity, flux, transformation, and transience.

The focus on instability is central to the following chapter, in which Marianne Elisabeth Lien and John Law discuss how ethnography can mobilize gaps and absences to speak to pressing political concerns. Their discussion centers on an inaugural ceremony held at a salmon farm on the west coast of Norway. A hatchery is about to expand, and the company assembles to celebrate. This process of assemblage is what interests Lien and Law, as they trace the particular way in which this ceremony enacts or conjures up overlapping social formations. The ceremony celebrates a moment of growth for the company as they expand their productive capacity, but Lien and Law are also attentive to other coexisting forms of growth—markets in fish and in pelleted fish feed, physical installations, jobs, parasites and diseases, regulations. Their ethnography follows the tensions among the intersecting scales of the global economy, industrial strategy, and community autonomy. Their analysis confronts the gaps and invisibilities that are constitutive of perspectives that cannot be rolled into one. Three ghosts, or manifest absences, haunt the celebrations: the ghost of bankruptcy in an unstable economic environment, the ghost of potential incapacity to sustain more intensive production, and the ghost of the potential fragmentation of social ties that might follow from the embrace of market competition. The chapter takes these three perspectives to show that while different relations come into view when we think about economic growth, the engineering challenges of industrial expansion, and the social effects of more intensive production, we should nevertheless remain attentive to what is occluded. Absences, invisibilities, and the unspoken garner ethnographic presence when the intrinsic instability of material relations are attended to.

Anna Tsing is also concerned with method and the politics of knowledge-making. Her chapter takes the form of a manifesto, bold and to the point. Tsing addresses those working at the interface of anthropology and science and technology studies. Acknowledging the necessary critique of positivist methods, she nevertheless calls for a renewed attention to the relational worlds of nonhumans. These worlds are classically the domain of the natural sciences, and the challenge is to think of these relations historically and thus to confound the separations of entrenched perspectives from the humanities (human focused) and from science (ahistorical). Tsing's suggestion, taken up

in the ethnographic arguments of several of the other chapters in this volume, is to counteract the structuring, dichotomous frames of nature and culture by focusing on landscapes, ecologies, and assemblages that help attune our understandings of how entities make worlds together. Landscapes, approached as sites of material coordination, defy the dyads of nature and culture that have underpinned environmental degradation and offer spaces for analysis where geographic contours and historical process come together to fashion habitats for life other than human life. Here Tsing finds hope beyond the human, in those beings who live and thrive in the wreckage of human extraction.

NOTES

1. There is a broad and rich literature across the humanities and social sciences, drawing on diverse overlapping strands of Western philosophical thought. Key texts include Harman (2002, 2005); Haraway (2008, 2016); Meillassoux (2008); Helmreich (2009, 2016); Wolfe (2009); Bennett (2010); Coole and Frost (2010); Shaviri (2014); and Kirksey (2015). These diverse traditions are discussed later in this introduction.

2. Robert Macfarlane, "Generation Anthropocene: How Humans Have Altered the Planet Forever," *Guardian*, April 1, 2016, <https://www.theguardian.com/books/2016/apr/01/generation-anthropocene-altered-planet-for-ever>. Some of the academic texts mentioned are Timothy Morton's *Hyperobjects: Philosophy and Ecology after the End of the World* (2013), Elizabeth Kolbert's *The Sixth Extinction: An Unnatural History* (2015) and *Field Notes from a Catastrophe: Man, Nature, and Climate Change* (2006), Naomi Klein's *This Changes Everything: Capitalism vs. the Climate* (2014), Gaia Vince's *Adventures in the Anthropocene: A Journey to the Heart of the Planet We Made* (2014), Anna Tsing's *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (2015), Jedediah Purdy's *After Nature: A Politics for the Anthropocene* (2015), McKenzie Wark's *Molecular Red: Theory for the Anthropocene* (2016), Jason W. Moore's *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (2015), and Jeremy Davies's *The Birth of the Anthropocene* (2016).

3. These are highly controversial proposals to solve global warming through engineering. There are mainly two types of designs, either removing carbon dioxide from the air or limiting the amount of sunlight reaching the planet's surface. One proposal is to spray sulfate particles into the atmosphere to reflect radiation back to space. According to a *Guardian* article, these schemes are being treated seriously by key persons within the Trump administration as cheap ways of solving global warming. "Trump Presidency Opens Door to Planet-Hacking Geoengineer Experiments," *Guardian*, March 27, 2017, <https://www.theguardian.com/environment/true-north/2017/mar/27/trump-presidency-opens-door-to-planet-hacking-geoengineer-experiments>.

4. The distinction no longer holds for either history or science—a point that Tim Ingold has long since argued in his discussion of the "arbitrary" distinction between evolution and history, and also a point that Latour draws attention to his 2014 lecture.

5. We should perhaps note that we do not assume ethnography in the form that Ingold (2014) has recently criticized. Ingold argues that the contribution of anthropology lies in its ability to take part in unfolding lives and realities and not, as is often claimed by anthropologists, in ethnography. “Ethnography,” a term he wants to reserve for its original meaning of a description of peoples, is, for him, the objectified, reified, and backward-looking construct that anthropologists make of their own ongoing learning and correspondence with others. We are not willing to tie ethnography to a version of the human in which anthropology is no longer invested (if it ever was). However, whether or not we want to reserve the term “ethnography” for these depositions, we agree with Ingold’s insistence that one of the core strengths of anthropological fieldwork is the potential to be part of life and to follow it as it unfolds.

6. See Manganaro (1990) for a useful edited collection on this topic.

7. The key citation on infrastructures that captures much of what was written before 2013 is Larkin in *Annual Review of Anthropology*. Since then an edited collection and a monograph have gathered more recent work: Harvey, Jensen, and Morita (2017) and Anand (2017). See also a special issue of *Ethnos* from 2017 edited by Casper Bruun Jensen and Atsuro Morita.

8. Ferme (2001) is an engaging example of such a perspective or, more recently, Willerslev (2007) and M. Pedersen (2011).

9. The growing literatures on the nonhuman offer a detailed analysis of the shifts in Western philosophical approaches to material agency. However, as Richard Grusin (2015) notes, the genealogies of these literatures are diverse: “The nonhuman turn in twenty-first-century studies can be traced to multiple intellectual and theoretical developments from the last decades of the twentieth century: actor-network theory, affect theory animal studies, assemblage theory, cognitive sciences, new materialism, new media theory, speculative realism, and systems theory” (<https://www.amazon.co.uk/Nonhuman-Turn-Center-Century-Studies/dp/0816694664>).

10. This volume was one of several quite diverse interventions from scholars seeking to develop approaches to semiosis that went beyond the analysis of human language as a process of representation and interpretation. Key contemporary references include the influential work of Eduardo Kohn (2013) and Webb Keane (1997, 2007). Kohn develops the notion of semiosis as an embodied process that not only is not restricted to humans but is foundational to human life as a mode of engagement with the other-than-human world. Keane’s ethnography of ritual language, politics, and religious practice in Indonesia works more specifically with the ways in which the power of speech is thoroughly entangled with the power of objects.

11. Debates around the culture concept are intrinsic to anthropological reflexivity and have taken different forms over the years. The current discussion of ontology differs from the “writing culture” debates of the 1980s (Clifford and Marcus 1986) and from the discussion of Roy Wagner’s influential work *The Invention of Culture* (1975).

12. See the debate in “Fieldsights—Theorizing the Contemporary,” special section, *Cultural Anthropology* online, January 13, 2014, <https://culanth.org/fieldsights/461-the-politics-of-ontology>.

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