## **Notes**

## JOINT PREFACE

- 1. See Lynch 1982; Price 2016.
- 2. For more information on these partnerships, see Ethnographic Terminalia, http://ethnographicterminalia.org; "Anthropology of the World Trade Organization," Institut interdisciplinaire d'anthropologie du contemporain, February 12, 2008, http://www.iiac.cnrs.fr/article1249.html.
- 3. But here, as in other respects, we find the aforementioned collaborative partnerships trailblazing. See, for example, Matsutake Worlds Research Group 2009; the exhibition catalogs and zines produced by Ethnographic Terminalia, http://ethnographicterminalia.org/about/publications; Abélès 2011.
  - 4. See, for example, Boyer and Marcus, forthcoming.

## INTRODUCTION

- 1. Latour 2004.
- 2. The counterfactual that is usually offered to offset the failure of the COP process is the success of the Montreal Protocol of 1989. However, it is worth mentioning that this protocol also inadvertently accelerated global warming by shifting from the industrial use of chlorofluorocarbons to hydrofluorocarbons, a process that has taken a further three decades to address.
- 3. On the crisis and/or compromise of neo/liberal political institutions see Brown 2015; Mouffe 2005; Rancière 1998, 2001; Sloterdijk 1988; Žižek 1999, 2002. Swyngedouw (2009) offers a perceptive analysis of the "postpolitical," technocratic character of environmental politics generally. Political anthropologists have recently begun to explore ironic responses to overformalized and performative modes of political practice, e.g., Bernal 2013, Boyer 2013b; Boyer and Yurchak 2010; Haugerud 2013; Klumbyte 2011; Molé 2013. These processes have meanwhile become a key focus of an

emerging anthropology of climate, e.g., Crate 2011; Crate and Nuttall 2009; Dove 2014; Fiske et al. 2014.

- 4. Povinelli 2016, 28.
- 5. Among many Marxist critics of neoliberalism, see especially Duménil and Lévy 2011; Harvey 2005, 2007; LiPuma and Lee 2004. For more Foucauldian takes on neoliberalism, see, e.g., Foucault 2004; Ong and Collier 2005.
  - 6. On "integralism," see Holmes 2000.
  - 7. Muehlebach 2016.
  - 8. Boyer 2013b.
- 9. See, e.g., Transition Culture, last updated February 2017, http://transitionculture.org; Degrowth, https://degrowth.org; Kallis 2011, 2018.
  - 10. Klein 2015; Graeber 2010.
  - 11. Colebrook 2017.
  - 12. Boyer 2014.
  - 13. Hymes 1972.
  - 14. Haraway 2003; Kirksey and Helmreich 2010.
  - 15. See Tsing et al. 2017.
  - 16. Stengers 2005; Lévi-Strauss 1966.
  - 17. Morton 2013; Boyer and Morton 2016.
- 18. For additional reflections on the ethics of anthropological theorization today that inform my position here, please see Boyer 2010; Boyer, Faubion, and Marcus 2015.
- 19. This is the key premise of the argument for the concept of "Capitalocene" over "Anthropocene."
  - 20. See Colebrook 2017.
- 21. Or, as Dipesh Chakrabarty has recently stated, "Today you need to both zoom out and zoom in. Unless you zoom in, into the finer resolution of the story, you don't see what humans are doing to each other. But if you don't zoom out, you don't see the human story as a whole in the context of other species, in the context of history of life." Cultures of Energy podcast, episode 19, June 10, 2016, http://culturesofenergy.com/ep-19-dipesh-chakrabarty/.
  - 22. Derrida 1976.
- 23. See Boyer and Howe 2015 for a fuller discussion of the capacities and mobilities of anthropological knowledge.
- 24. Elizabeth Povinelli has made a similar argument concerning her neologism, "geontopower" (2016), arguing that it is not an effort to posit "a new metaphysics of power" but rather to "help make visible the figural tactics of late liberalism as a long-standing *biontological orientation and distribution* of power crumbles, losing its efficacy as a self-evident backdrop to reason" (italics original). A concept like "energopower" plumbs a similar rift as Northern biopolitical imagination becomes disrupted and disabled by ecological and geological forces unleashed by its very efforts to enhance life and civilization.
- 25. I will sidestep here the lively debate over the ontological status of objects and "correlationalism" in contemporary continental philosophy (Bennett 2009; Bogost 2012; Harman 2002; Meillasoux 2008; Morton 2013; Povinelli 2016). Although the

epistemic attentions of this discussion are lively, its political attentions seem more impoverished, which makes it, on the whole, less urgent for this discussion of enablement.

- 26. The crucial texts that outline Marx's philosophy of labor and capital are the 1844 Manuscripts (particularly the manuscript on "Estranged Labor"), The German *Ideology*, and the *Grundrisse*. See Marx (1861) 1974 and also https://www.marxists.org /archive/marx/works/1845/german-ideology/index.htm and https://www.marxists.org /archive/marx/works/1844/manuscripts/preface.htm.
  - 27. Sutherland 2008.
  - 28. Burkett and Foster 2006, 127.
  - 29. See Marx (1861) 1974, notebook 7.
  - 30. See Marx (1861) 1974.
- 31. Land 2011; Mackay 2014. See also Alex Williams and Nick Srnicek, "#Accelerate Manifesto for and Accelerationist Politics," May 14, 2013, Critical Legal Thinking, http:// criticallegalthinking.com/2013/05/14/accelerate-manifesto-for-an-accelerationist -politics/.
  - 32. Sunder Rajan 2012, 14.
  - 33. Malm 2013; Malm and Hornborg 2014.
  - 34. Foucault 1984, 143.
- 35. Among them, Agamben 1998; Deleuze 1995; Hardt and Negri 2000; Povinelli 2016; Rabinow and Rose 2006.
- 36. Among them, notably, Beck 2007; Biehl 2007; Briggs 2005; Cohen 2005; Ferguson and Gupta 2002; Franklin and Roberts 2006; Fullwiley 2006; Greenhalgh and Winckler 2005; Lakoff and Collier 2008; Petryna 2002; Redfield 2005; Sunder Rajan 2012.
  - 37. Foucault 2000, 216-17.
  - 38. See Foucault 1980.
  - 39. Foucault 1979.
  - 40. Foucault 1984, 143.
  - 41. Rabinow and Rose 2006, 193.
- 42. See, e.g., Briggs and Nichter 2009; Greenhalgh and Winckler 2005; Petryna
  - 43. Luke 1999; relatedly, Malette 2009.
  - 44. Foucault 1993, 202.
  - 45. Boyer 2014.
- 46. In anthropology, this thinking was epitomized by the work of Leslie White (1943, 1949, 1959). See also, as examples of broader public commentary on the promises and perils of atomic energy, O'Neill 1940; Potter 1940.
- 47. See, e.g., Adams 1975, 1978; Rappaport 1975, in the Whitean tradition alongside a robust literature on the cultural and social impacts of energy development for indigenous peoples (Jorgensen et al. 1978; Jorgensen 1984; Nordstrom et al. 1977), especially in terms of nuclear power (Robbins 1980), uranium mining (Robbins 1984), and oil extraction (Kruse, Kleinfeld, and Travis 1982; Jorgensen 1990). Laura Nader's research on the "culture of energy experts" (1980, 1981, 2004) was pathbreaking and

helped set the stage for more recent ethnographies of energy experts (Mason and Stoilkova 2012) as well as for political anthropologies of carbon (Coronil 1997) and nuclear (Gusterson 1996; Masco 2006) statecraft.

- 48. See, e.g., Foucault 1984; Haraway 1985; Latour 1988.
- 49. This not only attracted renewed theoretical attention but also generated a much larger wave of ethnographic interest among anthropologists who have helped to renew energy as a research thematic. See, e.g., Appel, Mason, and Watts 2015; Behrends, Reyna, and Schlee 2011; Crate and Nuttall 2009; Henning 2005; Johnston, Dawson, and Madsen 2010; Love 2008; Love and Garwood 2011; Mason 2007; McNeish and Logan 2012; Nader 2010; Powell and Long 2010; Reyna and Behrends 2008; Rogers 2015; Sawyer 2004, 2007; Sawyer and Gomez 2012; Smith and Frehner 2010; Strauss and Orlove 2003; Strauss, Love, and Rupp 2013; Wilhite 2005; Winther 2008.
  - 50. Scheer 2002, 2006.
  - 51. Scheer 2002, 89.
  - 52. Boyer 2016.
  - 53. Mitchell 2009, 2011.
  - 54. Mitchell 2009, 407.
  - 55. Mitchell 2011, 173-99.
  - 56. See, e.g., Harvey 2007; Duménil and Lévy 2011.
- 57. This is one of Mitchell's central arguments: "When the global financial order was reconstructed after the Second World War, it was based not on reserves of gold, but on flows of oil. Gold reserves could no longer provide the mechanism to secure international financial exchange, because the European allies had been forced to send all their gold bullion to America to pay for imports of coal, oil and other wartime supplies. By the end of the war the United States had accumulated 80 per cent of the world's gold reserves. The Bretton Woods Agreements of 1944 fixed the value of the US dollar on the basis of this gold, at \$35 an ounce. Every other country pegged the value of its currency to the dollar and thus indirectly to the American gold monopoly. In practice, however, what sustained the value of the dollar was its convertibility not to gold but to oil. In both value and volume, oil was the largest commodity in world trade. In 1945 the United States produced two-thirds of the world's oil. As production in the Middle East was developed, and the routes of pipelines plotted, most of this overseas oil was also under the control of American companies" (2009, 414).
  - 58. See, e.g., Graeber 2011.
- 59. What I mean by "neoliberal disarticulation" is that petropower is no longer made to directly serve state interests as it was in the heyday of Keynesianism. Instead, the typical arrangement is an alliance between oil and gas corporations and certain political factions and institutions in order to allow petropower to be exerted on behalf of those corporations, their shareholders, and the speculative interests of the market.
  - 60. See, e.g., Howe et al. 2015; Gordillo 2014; Gupta 2013.
  - 61. Boyer 2016.
- 62. For Aristotle, "enérgeia" meant "activity" or "action" as distinct from δύναμις (*dynamis*), which meant "power" in the sense of capacity. James Faubion (pers.

comm.) cautions against "any temptation to read back the Newtonian notion of mechanical energy into Aristotle. . . . What happens is that energeia is taken up in Latin as meaning (basically) the force or vigor of expression (of words but also of potentiae [potentials], which allows it to be brought into the same semantic field with vis (force, power) and vis viva (living force, living power) and which basically allows the classical distinction between energeia and dynamis to collapse into the singular notion of energy/force as it is codified in mechanistic physics." Cara Daggett (2019) glosses Aristotle's enérgeia as "dynamic virtue" and strongly differentiates it from the Victorian conceptualization of energy as work, which was shaped by, among other forces, empire, evolutionary theory, Presbyterianism and thermodynamics.

- 63. Massumi 2015. Along similar lines, the work of Jane Bennett on "vibrant matter" comes to mind (2009), as does Povinelli's critique (2016) of the biontological premise of (Deleuzian) affect theory and vitalist thinking more generally.
  - 64. Boyer 2013b, 152-56.
  - 65. Žižek 1997.
- 66. As well as memories of the futures we wish to avoid; see, e.g., Oreskes and Conway 2013.
- 67. Many projects deserve recognition here. Those that have influenced this project most directly include the multimedia works of Brian Eno, Natalie Jeremijenko, Jae Rhim Lee, Smudge Studio, and Marina Zurkow as well as the "climate fiction" of Margaret Atwood, Paolo Bacigalupi, J. G. Ballard, Ian McEwan, Kim Stanley Robinson, Jeff VanderMeer, and Claire Vaye Watkins.
  - 68. Howe and Boyer 2015.
- 69. I mean "terroir" here less in the specific sense of "soil" and more in the capacious sense of local "climate" and "environs." It refers to the mesh of local power forms and forces that give a situation its distinct character, which we are only able to fully understand by being in that context.
- 70. I thank one of the two anonymous reviewers of the duograph for encouraging me to highlight the importance of the politics surrounding communal land tenure in this volume of the duograph. As they wrote in their notes, "One of the major causes of internal community conflict is that a relatively small number of comuneros are the legal owners of the comunidad/ejido land (most but not all are men). The comisariado assembly is their collective space for decision making. The whole comunidad agraria apparatus is heavily linked to the Mexican state imagination of rural agricultural productivity. This is a kind of terroir. . . . A[nother] major axis of intracommunal tension is between the citizens who are not commoners/land owners and get no benefit from individual private sales/leases or even community land leases. The collective political space for these citizens is the municipality/agencia municipal. The municipio has very little tax money and may be trying to raise money for roads, schools, etc., through its limited land use change authorization policy." These forms of tension are discussed at greater length in chapter 1 in the matter of the bienes comunales of Ixtepec and in chapter 2 in the politics of the La Ventosan ejido and smallholder private landowners.