

imbricate relations through which life on earth comes into being and dies. Long a believer in the precept that the questions you ask largely determine the answers you get, Haraway wants us to reconceptualize our relationships to our world in order to respond to them differently as a means to develop a different kind of “responsibility” for the nonhuman co-inhabitants with whom we share the planet.

This has always been an obvious but difficult task, and it is one Haraway has spent her entire career pursuing—now for more than half a century. Some readers may balk at Haraway’s claim that “staying with the trouble requires learning to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings” (p. 1). However, it has long been her argument that anthropocentric solipsism is hard to shake, because it is so hardwired into the familiar narratives through which “sky-gazing Homo” perceives life on earth as either a resource to be exploited or a problem to be solved.

Haraway and her companion thinkers offer an alternative view that reaches “beyond inherited categories and capacities, in homely and concrete ways” (p. 7). With characteristic citational generosity and erudition, she draws on a wide range of writings from Hannah Arendt, Isabelle

Stengers, Vinciane Despret, Thom van Dooren, Anna Tsing, Ursula Le Guin, Octavia Butler, Lynn Margulis, and Deborah Bird Rose, among others. Punctuated with evocative case studies of insects, flowers, bacteria, coral, sheep, amphibians, and fungi, Haraway’s primary idiom for her project is compost—“philosophically and materially, I am a compostist, not a posthumanist,” she writes, adding that humans and nonhumans “compose and decompose each other, in every register of time and stuff in sympoietic tangling, in ecological evolutionary developmental earthly worlding and unworlding” (p. 97).

To the falling sky, then, Haraway offers the lively uprising ferment of the rot below, the hot steam stack of vitally entangled decompositional relations that capacitate fertility, and the work of attunement needed to make humans think more like hummus, lichen, fungi, or acacia seeds. This isn’t a message for which there is a well-established scholarly style. But it is a reminder of what scholarship can do best when it is surprising, disorienting, insightful, disturbing, and forceful: it can catalyze critical thinking and recompose it as common sense.

REFERENCE CITED

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Technology as Human Social Tradition: Cultural Transmission among Hunter-Gatherers by Peter David Jordan

Oakland: University of California Press, 2015. 412 pp.

DOI: 10.1111/aman.12895

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This book’s aim is to outline a new methodology for studying material culture change based on the idea that technological traditions exhibit heritable continuity via social learning.

The introductory chapter sets the context for the methodology. Jordan argues that material culture is a critical feature of human life. We gain most of our subsistence with the aid of tools. For example, we build boats, make sleds and carts, ride domesticated animals, and construct specialized footgear to facilitate our movements. Making tools gave rise to traditions of stone knapping, pottery making, cooking, weaving, metallurgy, and much more, all long before the industrial revolution. Theoretical advances in the study of cultural evolution, based on the principle of descent with

modification, have given us the tools to understand how the intimate social patterns of who learns what from whom translates into patterns of cultural variation in time and space. Human cultural traditions both conserve and accumulate practices, but they also transform them by selective imitation and teaching. Over the last 50,000 years, especially, evolving material culture traditions have generally become more complex and more finely adapted to local environments.

The second chapter introduces methods that can be used to infer causes of the evolution of material culture. The focus is on social traditions of “ways of doing” that generate variation in practices on scales ranging from interindividual to multiple communities in space and from individual learning to evolving patterns on millennial scales in time. Complex technologies involve multiple operational sequences of their component parts. To operationalize these ideas, the analyst must define the social populations and subpopulations that are relevant to the technology or technologies being

considered and be able to define traits that can be scored by population—for example, by presence or absence. Given such data, one can apply methods devised by biologists to study organic evolution, such as phylogenetic analysis. The degree of intersocietal borrowing versus “vertical” (within society) transmission of cultural traits is one of the most important questions of interest. Another important issue is the degree to which different domains of culture, such as language and house form, bundle together or evolve independently. Innovations in phylogenetic analysis, reviewed in some detail, are aimed at answering such important questions. Ethnography gives insights about the details of the social structures that dictate who learns what from whom and is an essential complement to phylogenetic analysis.

At the core of Jordan’s book are dissections of the evolution of technology in three regions: Western Siberia, Northwestern North America, and Northern California. A short review cannot do justice to the rich detail with which these case studies are developed.

The Western Siberian case is a microevolutionary analysis based on detailed ethnographic work in the region conducted in part by Jordan but heavily supplemented by detailed work by Russian ethnographers. He finds that social and pragmatic considerations structure the evolution of different technologies differently, resulting in relatively little coherence between different technologies. Parents invest heavily in teaching their children how to make the essential technology to exploit the rather demanding Siberian environment, but adults also innovate themselves and seek to acquire desirable innovations from others. Differences in the relative importance of parental teaching versus later openness to innovation produce substantially different patterns. For example, a sophisticated dugout canoe is widely

distributed, despite being transmitted mainly from fathers to sons, because it is very useful.

The Northwest Coast example focuses on the macroevolution of house form, canoe form, and basketry/matting among the Coast Salish. Each of these domains of technology is embedded in a different social network, giving rise to quite different patterns of variation among Salish communities. House form parallels language, forming a coherent core tradition enforced by the long lives of houses and their importance in the patrilineal prestige system. Canoe form exhibits a branching pattern but not one that parallels house form and language. Canoe makers were a secretive guild whose members were often sought after by wealthy men in other communities. Basketry/matting traditions exhibit widespread mixing of traits largely because their female makers were much more mobile than men in the highly patrilocal Salish.

The Northern California example compares the basketry, house form, and ceremonial dress of the Northwestern coastal societies with the interior Northeastern ones. In the Northwest each of the technological domains except basketry exhibit branching patterns, but house form and ceremonial dress evolved independently of each other and of language. In contrast, in the Northeastern societies, ceremonial dress, basketry, and language all follow a generally similar branching pattern, while house form exhibits very little evidence of branching, perhaps because of high rates of innovation. These differences reflect differences in social organization.

Jordan’s methods provide a practical way of linking evolutionary theory, ethnographic observations, and large-scale ethnographic and archaeological data to understand the evolution of material culture. A pioneering piece of work.

Things in Motion: Object Itineraries in Anthropological Practice by Rosemary A. Joyce and Susan D. Gillespie, eds.

Santa Fe, NM: School for Advanced Research Press, 2015. 284 pp.

DOI: 10.1111/aman.12907

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Things in Motion makes stimulating reading for a broad readership; anyone interested in relations between people and things will find much to reward them here. The book is framed around an object-itinerary approach, which the editors argue yields an understanding of the movement, activeness, routes, and effects of things over time. It enables, they claim, insight into what things do, both on what Joyce describes as the “intimate” level of one human life and on the

far larger “scales of geology, cosmology, and social history” (p. 37).

The volume comprises an introduction and ten essays that consider the trajectories of objects through a range of archaeological and museum contexts. The themes and analytical approaches, however, are relevant well beyond archaeology and museums alone. There is an applied focus to some of the contents, too. Bauer’s discussion of the circulation of museum objects through loans and shared stewardship (chapter 8), for example, uses object itineraries as a means to explore how increased recognition of the rights over objects of originating communities affects involved museums. He argues that those communities, museums, and moving