



DATA, NOW BIGGER AND BETTER!

EDITED BY TOM BOELLSTORFF AND BILL MAURER



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Genevieve Bell, Tom Boellstorff, Melissa Gregg,
Bill Maurer, and Nick Seaver

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Introduction

Tom Boellstorff and Bill Maurer

This book brings together five authors responding to current debates regarding the new salience of big data in society. By big data, we refer to the mobile and digital computational systems that permit the large-scale generation, collection, and analysis of information about people's and devices' activities, locations, and transformations. We refer as well to as the social and technical effects of those systems and data, and the speculative hype, hopes, and futures that accompany them. While our individual responses address different aspects of these debates, four guiding principles link them together.

First, we challenge the strong tendency for discussions regarding digital technology to be shaped by obsessions with “trending.” The value of an analysis becomes measured by claims about the future rather than accuracy in explaining the past or present. From public health to climatology, trying to predict the

future is not always wrongheaded—it is good to act on signals indicating the outbreak of a disease, or to model what might happen to coastal cities as more carbon is dumped into the air. But with regard to the matter at hand, focusing on the unknowable often diverts critical attention from the emerging present. This is, for instance, why we refer to “big data” in this book, despite attempts by many commentators to claim the phrase is already antiquated. In our view the planned obsolescence of terminology leads to term-coinage standing in for insight. No term ever perfectly captures its referent. “Big data” helpfully denotes a set of sociotechnological facts and connotes an atmosphere of simultaneous hype and legitimate innovation that represents the subject of our collective inquiry.

Second, we challenge the cultures of expertise that characterize discussions of big data. The move to data is often characterized as a move away from narrative, from ethnography, from the qualitative and interpretive. But as many coders and number-crunchers themselves assert, we cannot treat data as a purely quantitative phenomenon. Our analyses are interpretive and critical in character, yet shaped by a range of deep engagements with data. We are located in both academia and industry, and see the complicities and collaborations that emerge from that double location as a source of conceptual strength.

Third, all of our contributions to this book draw on anthropological perspectives, but not specifically ethnographic ones. As Tim Ingold has argued in his aptly titled article “Anthropology Is Not Ethnography,” sociocultural anthropology is more than a basket of ethnographic methods like participant observation and interviewing. The value of anthropology lies also in its conceptual frameworks, frameworks

that are comparative as well as field-based. These theoretical contributions of anthropology date back more than a century, and turning to these classic debates provides an effective counter to the future-oriented hype and speculation so characteristic of discussions regarding big data. In this book, names like Malinowski, Lévi-Strauss, and Mauss appear as centrally as those of present-day thinkers. Discussions of kinship, exchange, and even cooking shape our analyses.

Fourth, our contributions are shaped by what our colleague Carl DiSalvo has termed “speculative civics”—which in his analysis links the emphasis on unknowable futures mentioned above with the emergence of entrepreneurialism and precarity in a public life shaped by data technologies not always open to scrutiny. The public is important, in both its classic and its newly emergent political senses. This is why we attend to activists like Edward Snowden and public intellectuals like Jaron Lanier, as well as broader debates over the nature of data and the meaning of “economy.”

Through these guiding principles, we seek to contribute to a vitally important debate over the relationship between data, power, and meaning in the contemporary world. Big data experts often speak of the “three Vs” when characterizing crucial parameters for understanding what makes data “big”: volume, variety, and velocity. In our view, “three Rs” might prove more significant: relation, recognition, and rot. We emphasize how data is formed through relations that extend beyond “data” itself; how what counts as data (and data’s referent) is a social process with political overtones; and that data is always in real-time transformation in ways that cut across notions of nature and

culture. Geoffrey Bowker and Lisa Gitelman remind us, to quote the title of the latter's recent book, that "*Raw Data*" Is An Oxymoron (2013). But like fruit and food, data can be transformed by decomposition as much as by "cooking it up" for analysis.

Our book begins with Genevieve Bell's "The Secret Life of Big Data." Drawing on her experiences as an anthropologist and Vice President & Intel Fellow at Intel Labs, Bell playfully anthropomorphizes and personalizes "big data" so as to unpack its meanings and implications from an anthropological perspective. In the chapters that follow, each of the remaining authors build from Bell's provocations to explore aspects of big data through the guiding principles discussed above.

Mel Gregg begins from the observation that the word "data" in English derives from the same Latin root as "gift," "that which is given." But, of course, data are never given in advance. Asking "what is big" and "what is data" pose problems of scale, scope, the epistemological claims involved in all the hype about big data—hype which often takes the form of visual representations, infographics and the like. Gregg turns to data's agency, its porosity, and its relation to a social and ecological environment, data sweat and data trash consequences. She reminds us, too, that the colonial impulse in big data's technological infrastructures, conditions of production and modes of knowledge mean that the gift never comes for free.

Bill Maurer takes up the internet guru and critic Jaron Lanier's call for a new economy of big data, one that would reward people for the collection and use of "their" data. While Lanier's proposal is compelling, Maurer argues that it sidelines key questions regarding the nature of property and person,

issues of longstanding anthropological concern. Drawing an analogy with the dawn of new reproductive technologies, Maurer asks whether we are witnessing a similar new kind of birth. He extends this line of thinking by drawing on the anthropological canon of kinship and exchange theory, asking what other relationships come into view if we treat "big data" as party to a marriage exchange, and complicate the gifts we imagine data brings with some of the bastard algebra Seaver dissects.

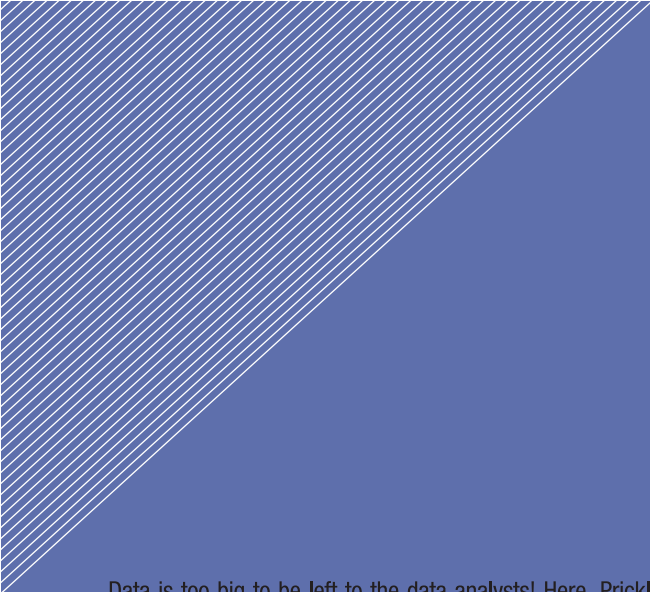
Tom Boellstorff seeks to open a conversation regarding the theoretical frameworks that shape the notion of "big data," despite the fact that the very term is often taken to imply a pre-theoretical or even non-theoretical perspective on the world. In his chapter (a substantially revised version of an essay that appeared in the journal *First Monday* in October 2013), Boellstorff first explores the history of the notion of "data," but also the way in which a sense of being "dated" haunts the study of internet-related technology and society. He then turns to the notion of "metadata," showing how distinctions between data and metadata are social (and political) rather than a priori. He then develops the notion of "the dialectic of surveillance and recognition" to examine how social relationships to big data are shaped by desire as well as fear. Finally, he reframes the distinction between "raw data" and "cooked data" by introducing notions of "rotted data" and "thick data."

Our collaboration is shaped by a dense network of social and intellectual relationships stretching back two decades, but made possible in its current incarnation by the Intel Science and Technology Center for Social Computing (ISTC-Social). The ISTC-Social is an example of some of the new collaborations anthro-

pologists are forging in hybrid industrial-academic settings. Bill Maurer and Scott Mainwaring have written for the *Journal of Business Anthropology* about the odd economic and intellectual configurations that brought the ISTC-Social into being. But this pamphlet is not “about” the collaboration so much as a demonstration of what such a venture can do. We thank in particular Paul Dourish for his support and insights in that regard, and have found the conversations and collaborations made possible by this center to have helped us advance the arguments we make throughout this book.

The Secret Life of Big Data

Genevieve Bell



Data is too big to be left to the data analysts! Here, Prickly Paradigm brings together five researchers whose work is deeply informed by anthropology, understood as more than a basket of ethnographic methods like participant observation and interviewing. The value of anthropology lies also in its conceptual frameworks, frameworks that are comparative as well as field-based. Kinship! Gifts! Everything old is new when the anthropological archive washes over “big data.” Bringing together anthropology’s classic debates and contemporary interventions, this book counters the future-oriented hype and speculation so characteristic of discussions regarding big data. By drawing as well on long experience in industry contexts, the contributors provide analytical provocations that can help reframe what may prove to be some of the most important shifts in technology and society in the first half of the twenty-first century.

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