EXPERIMENTING WITH ETHNOGRAPHY

A Companion to Analysis

ANDREA BALLESTERO AND BRIT ROSS WINTHEREIK, EDITORS

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ANDREA BALLESTERO AND
BRIT ROSS WINTHEREIK

Analysis as Experimental Practice

This collection grapples with analysis as a constitutive process of ethnographic work. It picks up where most discussions on ethnography as a form of knowledge production stop: the point at which we are called to specify how we perform analysis. If analysis is the practice of immersing oneself in ethnographic materials in order to transform them into insights that are not automatically apparent, how exactly does that alchemical process play out? Contributors in this book take a radically ethnographic approach to answer this question. They examine their own analytic practices and thinking habits to offer conceptual and practical insights into analysis as a practice that unfolds in concrete social, material, and political contexts. That is, instead of developing a universalized discussion of analysis as an abstract category of thought, each chapter engages with analysis as a concrete mode of action, laying out the specific moves of a particular analytic experiment. Put differently, each of the contributors theorizes the process of analysis by performing it. The result is something akin to a guide, a companion for the reader to borrow thinking habits they can adjust and make their own.

In this introduction we frame the analytic experiments the contributors offer by laying out the distinct approach the collection follows. To begin, let's consider a familiar (but hypothetical) figure: an ethnographer. She is going through her research materials once again. She is immediately immersed in the worlds she wants to learn more about and in the worlds out of which she conducts her inquiry. Those various worlds may overlap geographically, or they may not. She thinks alongside collaborators of various sorts: friends, interlocutors, authors, ancestors, advisors. She goes through sound files, notes, memories, stories, found and constructed

objects. She mobilizes categories that she has inherited: kinship, religion, technology, law, embodiment, colonization, territory. She borrows other categories: biopolitics, capital, cyborg, naturecultures, governance, becomings, rhizome. Additionally, in the past ten years, our ethnographer has encountered new ethnographic labs, studios, and collaboratories where experiments with media, narrative genre, and the creation of new publics proliferate. And yet, amid all of that richness of resources, she is still after something that remains unruly and often is collapsed into preexisting theoretical concepts: an explicit take on analytic practice.

Our ethnographer is after a form of analysis that creates an opening for making sense of something that she cannot fully anticipate, despite having a fleeting sense of its presence. During her training, there was little discussion about how to establish and navigate that analytic opening. She learned to mobilize categories such as scale, time, process, and relations to craft a theoretical parallax or a provocation (Ballestero 2015). She learned techniques for interviewing, notetaking, coding, categorization, and data visualization (LeCompte and Schensul 1999; Bernard 2006; Lave 2011). She has also learned to think about the affective power of literary moves and poetic licenses (MacGranahan 2020; Pandian and McLean 2017). But the opening she is after is elusive. It is difficult to pinpoint because it can emerge at any phase of the research process and can take a variety of forms. Throughout her training, our hypothetical ethnographer was told that such an analytic opening could appear serendipitously, emerge after long periods of staring at the blank page, irrupt in conversations with colleagues, hit her emotionally in the field, or transpire from cyclical recodings of her notes and rewritings of her narrative. Furthermore, to generate said opening, she might even have to "go back" to the field to conduct follow-up research. She has also heard many ethnographers praise beautiful writing, detecting an intrinsic ascription: if you have literary skill, analytic power follows.

Our hypothetical ethnographer may observe that these takes on analysis can result in a dual and contradictory mystification. On the one hand, they can turn analysis into an ethereal process that depends on a creative and affective spark, made explicit only through the craft of writing, and that can never be systematized without exhausting it. On the other hand, they can turn analysis into a mechanical procedure that flattens the richness of our ethnographic encounters, creating a subject-object partition through practices of capture, breaking down, and dissection (Holbraad et al. 2018, 19). This book challenges both forms of mystification and does not assume

analysis has to be an intractable creative process or a violent mechanistic procedure. Rather, we argue that analysis is a creative and organized process of generating insights. It is a process that can be full of space for imaginative thinking while resolutely grounded in a distinct understanding of empirics that is thoroughly ethnographic. In our rendering, analysis is a practice by which we can intensify the conceptual creativity and relational commitments that sit at the core of ethnography in its best forms. Thus the purpose of this book is to offer ways to perform this form of analysis in a way that allows us to stay steadfastly bound to the creative and inventive edge of ethnographic knowledge production. Our aim is to refuse to black-box analysis as something that is, in the best case, inaccessible, happening in the background as you do other things, and in the worst case, a violent imposition of hegemonic thought. Quite to the contrary, the authors in this collection take analysis as a process that entails careful and deliberate crafting. This process is one with fieldwork experiences, interpersonal relations, institutional and organizational settings, and the material, historical, and conceptual infrastructures on which all research depends.

OPENING ANALYSIS

As you go through the chapters in this collection, you will see that the contributors operate under the assumption that analysis is an exercise in seeking an unanticipated insight—something that could have not been predicted with existing categories yet nevertheless depends on them. Collectively, contributors see analysis as a means to approach something that lies beyond the "predictable and the uncertain" and sits in the "space of excess, of telling us more than we knew to ask" (McGranahan 2018, 7). This does not imply that analysis is always about pursuing the new. It does mean, however, that analysis seeks ways of noticing that which seems to be there in one's materials and relations but cannot be immediately articulated as such. In this sense, ethnographic analysis shares a lot with what the Nigerian poet Ben Okri (1997) refers to as the quickening of the unknown. Jane Guyer (2013) elaborates on Okri's usage of the notion of quickening by noting how it does not refer to speed but rather to something else, to the enlivening of an unknown, marking its presence by drawing it into recognizable existence. Veena Das (2018) uses the language of concepts and the production of anthropological texts to make a similar point. She notes that ethnographic analysis flourishes when it works through "singular concepts [. . .] whose mode of generality is different from that

of comparison between different objects or cases" (10). A singular concept is not meaningful because it illustrates a typified series, for example, a new ethnographic example of coming-of-age rituals, human-nonhuman relations, or settler colonialism. Rather, the power of singularity lies in how ethnography enlivens a concept itself, becoming its flesh (Das 2018, 10) and thus bringing it into existence in a different manner than how it previously was. In this sense, "what counts as empirical [in ethnographic knowledge production] already bears the imprint of the conceptual" (11), and, at the same time, what is conceptual is given life and existence through the empirical charge of ethnographic relations. Thus ethnographic analysis at its best enlivens thought and concepts through a type of singularity that cannot be reduced to an example or an instantiation of a predetermined category.

This notion of analysis as the process of enlivening concepts frames a necessary question that ethnographers in anthropology do not discuss often: By what specific procedures or habits of thought does that quickening, enlivening, or opening happen? If analysis is a concrete process of opening our insights, we should see it happening in particular times and places and through concrete means (e.g., writing, conducting fieldwork, following protocols, reorganizing materials). Concretely, this enlivening unfolds in a condition of immersion that yields an ethnographic effect (Strathern 1999). Immersion in the worlds that we want to make sense of, and immersion in the act of producing knowledge, with all its inherited instruments (Helmreich 2007), and political entanglements and implications. But immersion can easily become drowning if it is not crafted with embodied and theoretical skill. It is not uncommon for ethnographers to have a moment of feeling drowned by the rich and extensive reach of ethnographic relations that our work enacts. Each of the chapters in this book offers one concrete way to dwell in generative immersion rather than drown.

Along with fieldwork, theory, writing, and method, analysis is part of a semantic cloud that orients research design, fieldwork, and narrative composition. The necessity or impossibility of establishing borders between these concepts has historically generated deep intellectual discussions.[1] In this book we do not focus on this kind of boundary-making, for numerous reasons. First, the contributors come from various intellectual traditions and would arrange those concepts, and their boundaries, in very different configurations according to their own epistemic commitments. Thus, presenting a unified theory of what analysis is and where it sits in relation to method or writing would imply a kind of homogeneity that does not

adequately capture the rich diversity that this collection highlights. Another reason for avoiding establishing boundaries is that we deliberately engage analysis as a historically specific exercise that channels our attention to grasp something in the world that at first seems elusive. We do not take analysis as an abstract category in need of definition but consider it a historically and materially grounded practice. Consequently, we have designed the book so that each chapter enlivens the concept of analysis through the singularity of the concrete historic form the author gives to analytic practice. As a result, we bracket what for some is a necessary place to begin: the question of what analysis is. Instead of asking "what is analysis," this book engages with the question of "*how* is analysis," and it offers nineteen answers.

Finally, asking "how is analysis" instead of "what is analysis" prevents us from reducing analytic practice to a transitional stage between fieldwork and theory, something to get over quickly, a mere point of passage before settling on an empirical finding or category. That rush to pass through analysis feeds into the desire to produce insights that travel quickly, usually in the form of a concept or argument, so that they can be "applied" to other cases. Through nominalist categories or propositional statements, these traveling insights promise to move seamlessly across contexts and among readers, losing in the process the lively power of their singularity. Each of the chapters in this collection expands the duration of analysis through concrete experiments designed to draw on ethnographic liveliness, quicken conceptual power, and open space for that which could not be anticipated. These experiments open up space to cultivate the incredible power of ethnographic knowledge forms while embracing the interpersonal commitments of our research practice as inherent to its analytic power.

THE TIMESPACE OF ANALYSIS

It is possible to think that in order to "make space" for this kind of analytic singularity it is necessary to "make time," that is, to carve out hours in the calendar. But making space does not necessarily mean adding more hours to the workday or more days to the research schedule. As ethnographers ourselves, we are in no way strangers to the pressures of the neoliberal university or to the demands for quick, actionable knowledge outside of it. Furthermore, the SARS-Cov2 pandemic that began in 2020 once again sharply revealed the gendered, classed, and racialized conditions that

structure not only social relations but academic inquiry globally. Nevertheless, we do not argue for a return to some idealized era when thinking was supposedly an intrinsically slow and egalitarian practice. What we are proposing are a series of techniques to help craft the conditions for enlivening analytic insights through experiments that create a distinct timespace. An example might help bring our point home.

Let us think with the well-known notion of the dazzle, an idea that Marilyn Strathern (1999) put forward twenty years ago to describe being grabbed by an image from fieldwork and being unable to let it go. The notion of being dazzled has traveled widely, and many refer to it to capture powerful moments when ethnographic research puts in front of us something that arrests our imagination, a situation in which we are entrapped in the net of another world (Wagner 2001; Corsín Jiménez and Nahum-Claudel 2019). Although this notion has been widely embraced, something is lost when the "dazzle" is transplanted into a new ethnographic context. The dazzle was a singular response to a particular ethnographic encounter; it was not meant to become an abstract concept to be dis-embedded and re-embedded as if it could be seamlessly transplanted into any context. For Strathern, the notion of the dazzle was a way of suspending the grip of the ethnographer's theoretical models, halting what she already knew and what she thought she should focus on, in the face of an encounter that required she make sense of it on its own terms. The idea of being dazzled offered a timespace for the bodily labor of analysis to unfold—the tasks of organizing interviews, composing index cards, crafting vignettes. This kind of labor pauses the thinking body, slowing down thoughts that rush ahead to make the encounter fit under preexisting categories. As Strathern notes, the dazzle created suspension to deal with the problem that "as soon as you drop one theory, another rushes in. [This is the problem:] that one never has an empty head. There's always something to fill it with and it'll be common sense if it's nothing else."[2] Ultimately, it is by crafting this kind of suspended analytic timespace that one can precipitate that sense of immersion that allows one to approximate the elusive ethnographic insight, to precipitate the enlivening of our sense-making process.

It is this notion of a timespace for suspension that this collection puts at the center of the systematized but messy labor of analysis. This entails committing oneself to analysis-as-craft, in kinship with the Greek concept of *technē*. In this rendering, analysis is a practice where bodies, instruments, theories, debts, curiosities, and responsibilities coalesce around the desire to make something present, to draw something into being. This practice

depends on cutting-edge and rudimentary tools: it can be achieved with index cards, data visualization software, handwriting, and satellite images alike. What is inescapable, though, is that analysis-as-craft is not invention out of thin air, nor is it flat reproduction of the already known. It cannot be reduced to developing better observational skills, precise data collection techniques, or more accurate abstractions. Nor is it enough to write evocative texts. It is not about choosing a theorist in advance or claiming to have no theoretical preferences. Analysis transpires at the intersection of many of these and according to the specific problems and questions at hand.

The contributions in this book embody this idea of analysis-as-craft and translate it into a series of techniques to generate suspension, to expand the timespace of analysis. Each of the techniques you will encounter is an experiment to wonder, a process that depends on a "certain duration so that doubt and confusion can endure long enough to allow qualitative leaps and contradictions in our sense-making" (Ballestero 2019, 32). This kind of wonder is possible when conditions for structured play are put in place (Fortun 2009). Furthermore, we understand these conditions as ways of "staying with the trouble" (Haraway 2016) and directing our analytic movement athwart (Helmreich 2009). They are the conditions of possibility for finding companion concepts (Winthereik 2019), embracing unwanted afterlives (Murphy 2017b), and experimenting with kinky forms of empiricism (Rutherford 2012). Each technique offers an opportunity to co-labor (De la Cadena 2015) with what peers and interlocutors share with us.

ANALYTIC PRACTICE IN COMPANIONSHIP

We invite readers to think about this volume as a companion to analysis. A companion text sits somewhere between handbook and guidebook, and this collection fulfills that sense of the term. It has been conceived as a resource to turn to for concrete suggestions on how to begin or continue ethnographic analysis. But companionship is also a particular type of relationality. It is a form of copresence that entails proximity during highs and lows. Not devoid of asymmetries or completely smooth, companionship entails a persistence across the waves of events that populate our lives. This book came into being in that kind of companionship.

In spring 2016 we held a workshop through the Ethnography Studio (www.ethnographystudio.org) that Andrea runs. The workshop explored notions of intervention and collaboration through the Skyspace, an

FIGURE I.1 *Twilight Epiphany* (2012), the James Turrell Skyspace at the Suzanne Deal Booth Centennial Pavilion at Rice University. Photo by Florian Holzherr. Courtesy of Rice Public Art.

installation by artist James Turell (figure I.1) at the Rice University campus.[3] We had already initiated a conversation to connect the Studio with the ETHOS Lab (https://ethos.itu.dk/) that Brit led at the IT University of Copenhagen, and this was the first opportunity for a joint event. One of the reasons why we chose the Skyspace stemmed from what ethnographers learn early in their practice: they have to work with what is there. They cannot always catch a spectacular event or craft an experimental setup while doing fieldwork. The Skyspace offered an opportunity to experiment with how to think with something that was just there, however spectacular it is.

As an art piece, the Skyspace becomes breathtaking at dawn and dusk when a light show transforms, softly but continuously, the ceiling of the structure by changing its color and with it the visitor's perception of the sky that is visible through an opening at its center. Our workshop did not take place at any of those times. Thus, the time we spent inside the Skyspace was not exactly breathtaking. Like so many instances of ethnographic research, nothing eventful seemed to happen while we were there. We—Andrea, Brit, and a group of graduate students—stayed inside the installation for approximately fifteen minutes; some of us sat on the granite benches designed for audiences to see the light show, while others climbed

to the second level. We were all trying to be fully present, as ethnographers would. As we attuned our senses to our surroundings what we captured was the sound of motorized lawn mowers circling the structure, the sirens of ambulances rapidly approaching the medical center across the street, and the conversations among students from the music school briskly cutting across the installation to make it to class on time. Any unique insight about intervention, collaboration, or noticing (the keywords in the title of the workshop) that we wished to generate out of the experience would need considerable intellectual labor to be drawn out. And yet, despite its lack of dazzle, being there was not a completely flat experience. Our imagination was cautiously enlivened with potentialities as we noticed threads: the aesthetics of higher education in the US, the burdens of labor on immigrant bodies, the motorized lawn mower as a technological device, the rhythms of sound, and the practice of listening.

After the workshop was over, as we debriefed, the conversation circled back to the questions of what role analytic practices have in ethnography and how they help open up ethnographic encounters that (1) are far from exceptional occurrences, (2) feel more like unremarkable events waiting to be untangled, and yet, (3) tease our imagination with something that needs to be deciphered even if it cannot be immediately articulated. Our thinking about this kind of ethnographic encounter was inspired by feminist and STS (science and technology studies) scholars who have taught us that the world is not a flat or passive entity available for reflection at the will of a disembodied and "objective" explorer (Daston and Galison 1992; Harding 2015; Noble 2016; TallBear 2019). Considering these epistemic affinities and the fact that both of us did ethnographic fieldwork in what could be classified as unremarkable settings (e.g., office spaces, meetings, documents, laboratories), we wondered about the techniques we used to craft the sense of exceptional analytic openness that we so often experienced in our ethnographic work. We quickly arrived at a rich array of resources that anthropologists have developed to address the three issues that dominate discussions about ethnography: fieldwork, theory, and writing (Clifford and Marcus 1986; Hammersley and Atkinson 1995; Boellstorff et al. 2012; Nielsen and Rapport 2017; Estalella and Criado 2018; Hegel, Cantarella, and Marcus 2019). And yet, we craved resources that focused on analysis as a practice that does not fall into cognitivist or mechanical territories but can, nevertheless, be engaged as an organized and methodical process.

In searching for those resources, we were struck by many ethnographers using their creativity to design techniques to conduct the kind of analysis

that captured our imagination. Those techniques, however, had remained unpublished for the most part and did not circulate as widely as resources on qualitative methods or ethnographic writing have. Our own experiences in the Ethnography Studio and ETHOS Lab were evidence of this: while we had designed a number of analytic experiments with our students, they remained unpublished and circulated only within small circles. At that moment, we could think of two exceptions: the "Implosion" exercise as conceived by Donna Haraway and developed by Joe Dumit (2014), and Kim Fortun's (2009) "Figuring Out Ethnography" memo system. Both of these had indeed traveled widely in anthropology and STS, filling an important gap and becoming part of many methods and research-design courses. We knew that many more analytic experiments like those were happening around us; a good number of researchers were developing analytic techniques and collaborations to engage ethnographic materials in generative and open-ended forms. Many of those were connected to a proliferation of centers, labs, and studios that have emerged recently, and yet, there were no sources where they could be consulted.

That is how this book emerged: out of the desire for a companion to analytic practices that preserves the open-ended and creative forms of thinking we were fond of and that brings together many of the inventive techniques ethnographers have produced to recapture analysis. We reached out to colleagues whose work we had found particularly inspiring and invited them to join us in creating the companion we wished for. The invitation was not without requirements. First, we asked the contributors to produce pieces that were shorter than a standard academic text—no more than four thousand words. We also asked them to include in their chapters a description or example of how they used the technique they were sharing.[4] The texts had to show by doing. And finally, we requested they condense their technique into a set of instructions, something we decided to call an "analytic protocol."

ANALYTIC PROTOCOLS

Our decision to use the concept of an analytic protocol links this collection to the tumultuous history of experimental spaces in laboratories and experimental settings (Rheinberger 1997; Latour 1999; Tilley 2011; Kowal, Radin, and Reardon 2013; Davies et al. 2018; Wolfe 2018). In those spaces, a protocol is the experimenter's purported practical guide to generating new insights while following standardized steps from one iteration to the next.

But that connection does not imply that the authors in this book replicate the premises that shape the use of protocols in those settings. In particular, we wanted to work with the figure of the protocol while also refusing to reproduce the violent, extractivist, and essentializing legacies it carries. As we finish this book, the protocol has become part of our everyday lives as governments depend on its form to handle contagion and reshape social interactions in public spaces. At the time we were conceiving this book, however, we moved carefully wanting to generate straightforward, almost telegraphic, sets of instructions—something like condensed versions of broader analytic trajectories that offered orientations but could never be taken as comprehensive, totalizing. We also knew that a protocol is probably an imperfect name for what the authors are offering. Calling a technique designed to open up analytic possibilities a "protocol" can potentially bring to mind a sense of closure, of decontextualized repetition. And yet, we committed to it as a way to work from within its constraints to show how fixed structures provide space for improvisation and inventiveness.

As we deploy the notion of a protocol, we also refuse the fiction of pure replicability, rejecting any connotations of a protocol as a device to close off variation. Instead of disciplined reduction to secure replicable results, the protocols the authors have crafted set up conditions to create analytic timespace. The protocols help suspend the rush. They create the conditions to slow the urge to swiftly elucidate an ethnographic puzzle or pin down a slippery encounter. They do so by increasing analytic duration, enlivening ethnographic singularities. Protocols invoke a sense of organized reflection that, we argue, is essential for the unruly creativity of ethnographic analysis to flourish. Thus, although the idea of a protocol might elicit suspicion, we want to hold on to that feeling. We mobilize it to explore the power of ethnographic thinking in suspension of both "assumptions and disbelief" in order to allow different arrangements and possibilities to emerge (Choy and Zee 2015). After all, suspicion and suspension share a lot and warrant joint consideration. The urgent demands we face require this kind of creativity.

As you go through the pages in this companion to analysis, you will feel summoned by some protocols but not others. You might decide to experiment with a technique that does not seem to fit very well with your questions, or, conversely, you might want to go directly to the ones that intuitively make sense. Regardless of where you choose to begin, the techniques and their protocols will give you a starting point for creatively adjusting them according to the specific questions at stake. The power of the

techniques these protocols embody is that they are deeply explorative and experimental while also being structured and methodical.

We have grouped the protocols into four clusters according to how they carry out the work of suspension. In part I, you will find the techniques that center on forms of bodily labor, representation, or both. The chapters in part II all involve handling, comparing, and designing physical objects. Part III contains techniques that gain their efficacies through infrastructures, digital or otherwise. And last, in part IV you will find techniques that toy with incommensurabilities and with the (im)possibility of overcoming them during analysis. Two afterwords close the collection in lieu of a conclusion. Written by four researchers that were PhD students at the time, the afterwords frame the analytic techniques in the context of their pedagogical trajectory, crafting their own ethnographic projects for the first time. One of the pieces engages the chapters from a pre-fieldwork perspective and the other, post-fieldwork. The overall organization of the book is a temporary grouping, a transitional order that does not exhaust the techniques, what they have in common, or what makes them different. We hope you enjoy playing with the possibilities this companion to analysis opens. Each chapter and its protocol is an invitation to cultivate the unique analytic power of ethnographic knowledge production. We extend each chapter as a lasting invitation to enliven the singularity of analysis in your own research and pedagogical practice.

NOTES

1. In the US tradition, this was already a worry of Boas, who early on challenged the role of preexisting categories as ordering devices because they reduced cultural traits to isolated examples, erasing their real meaning, which had to be elucidated via their historical integration into particular cultural wholes. Since then, the articulation of empirics, method, theory, and writing has been at the core of anthropology's debates around knowledge production.

2. Marilyn Strathern, personal communication, November 2017.

3. The workshop consisted of several parts: a preparatory visit to the artwork by Andrea and Brit, a short introductory presentation for students, a collective visit by workshop participants to the Skyspace, and a discussion in the Anthropology Department's seminar room.

4. We subjected ourselves to the same restriction and kept this introduction within the four-thousand-word limit as well.

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CONTRIBUTORS

PATRICIA ALVAREZ ASTACIO is an anthropologist and filmmaker whose scholarly research and creative practice develops in the folds between ethnography, critical theory, experimental methods, and the documentary arts. She is an assistant professor in the Anthropology Department at Brandeis University. Patricia is currently working on her book manuscript *Moral Fibers: Making Fashion Ethical*, which explores the Peruvian alpaca wool supply chain, analyzing how, through the intervention of development projects, indigenous women artisans and their aesthetic traditions are interpolated into "ethical fashion" manufacturing networks. Her latest film, *Entretejido*, weaves together the different sites and communities involved in this supply chain, bringing viewers into contact with the ways objects we wear are entangled in national racial politics and histories.

ANDREA BALLESTERO is an associate professor of Anthropology at Rice University. She is also the founder and director of the Ethnography Studio (https://ethnographystudio.org/). Her research examines spaces where the law, economics, and technoscience are so fused that they appear as one another. Her areas of interest include the politics of knowledge production; economic, legal, and political anthropology; water politics; subterranean spaces; and liberalism. She is the author of *A Future History of Water* (Duke University Press, 2019).

ALBERTO CORSÍN JIMÉNEZ is a reader in the Department of Social Anthropology at the Spanish National Research Council in Madrid. His interest in the organization of ethnography and anthropological knowledge as descriptive and theoretical forms led to the publication of *An Anthropological Trompe l'oeil for a Common World* (2013). He is also the editor of *Culture and Well-being: Anthropological Approaches to Freedom and Political Ethics* (2008), *The Anthropology of Organisations* (2007), and *Prototyping Cultures: Art, Science and Politics in Beta* (2017). He is currently writing an ethnographic history of the free culture movement in Spain.

IVAN DA COSTA MARQUES graduated in electronic engineering from the Instituto Tecnológico de Aeronáutica (1967) and obtained a master's degree (1970) and

doctorate (1973) in electrical engineering and computer science at the University of California Berkeley. Upon returning to Brazil, he was a professor-researcher in the graduate school of engineering at the Universidade Federal do Rio de Janeiro (UFRJ). From 1977 to 1980 he was the coordinator for industrial and technological policy of CAPRE and the technical director of Digibrás (agencies of the Ministry of Planning). From 1981 to July 1986 he was the CEO of Embracomp, a small private manufacturer of terminals and other computer products in Rio de Janeiro. From August 1986 to July 1990 he was the CEO of the state-owned computer manufacturer COBRA. For two decades he obtained experience in economics and production engineering. He sought to be technically and politically active in the Brazilian scenario, especially on issues related to technological development, education, international division of labor, and the computer industry. From August 1990 to July 1992 he joined the Historical Studies Committee of the New School for Social Research in New York as a visiting scholar, focusing on the history of science and technology. In 1995 he returned to UFRJ as a full-time professor-researcher in the Graduate School of Engineering and the Department of Computer Science. In the past two decades he has been dedicated to the development of science studies in Brazil, associated with the UFRJ's Graduate Program in History of Science and Techniques, and Epistemology.

STEFFEN DALSGAARD holds a PhD in anthropology and ethnography from Aarhus University and is currently an associate professor in the Business IT Department at the IT University of Copenhagen. He has carried out more than two years of ethnographic fieldwork in Papua New Guinea about a range of topics including canoe craftsmanship and tradition, state and leadership, and perceptions of nature and value seen through the commodification of carbon. His publications have mainly appeared in anthropology journals such as *Anthropological Forum*, *Ethnos*, *HAU*, *Social Analysis*, and *Social Anthropology*. He is the editor, with Morten Nielsen, of the volume *Time and the Field* (2015).

ENDRE DÁNYI is a guest professor for the Sociology of Globalisation at the Bundeswehr University in Munich, Germany. The project discussed in this book was Endre's PhD research, which was a material-semiotic analysis of the rise and fall of liberal democracy in Hungary. In his habilitation project he is examining the European refugee crisis, the "War on Drugs," and Indigenous initiatives in northern Australia as instances where parliamentary politics reaches its limits, thereby generating productive tensions. In addition to research and teaching, Endre is busy corunning Mattering Press, an open access book publisher.

MARISOL DE LA CADENA teaches at the University of California Davis; she was trained as an anthropologist in Peru, England, France, and the US. The Andes of Peru have been her field site, and she has recently been working in Colombia. Thinking through ethnographic concepts, she has published extensively on race and indigeneity; her current work is on multispecies political economies. She is the author of *Indigenous Mestizos: The Politics of Race and Culture in Cuzco, Peru,*

1919–1991 (Duke University Press, 2000); *Indigenous Experience Today*, edited with Orin Starn (2007); *Earth Beings: Ecologies of Practice across Andean Worlds* (Duke University Press, 2015); and *World of Many Worlds*, edited with Mario Blaser (Duke University Press, 2018).

RACHEL DOUGLAS-JONES is an associate professor at the IT University of Copenhagen, where she is the head of the Technologies in Practice research group and codirector of the ETHOSLab. She conducts research at the intersection of medical anthropology and computational cultures, cultivating interests in forms of ethical governance over technological change. These interests developed through studies of NGO networking and the capacity building of ethics review processes in the Asia-Pacific region, out of which she has published a number of articles attending to the form of ethics review in global health. She has also followed committee work into the contentious domain of embryonic stem cell research ethics committees in the US, examining the vestiges of voluntary governance mechanisms. Recent publications include an analysis of tech manifestos, a chapbook made out of data protection legislation erasure poetry, and a bestiary of digital monsters.

CLÉMENT DRÉANO is a PhD candidate at the University of Amsterdam in the program group Anthropology of Health, Care and the Body. He studied sociology, philosophy, and musicology at the universities of Nantes and Frankfurt am Main. His doctoral research involves ethnographic fieldwork in Ghana and the Netherlands, where he seeks to explore ideals and practices of good living with sickle cell disease and how bad surprises and moments of crisis participate in shaping them. His interests are in ethnographic methods, science and technology studies, medical anthropology, and feminist approaches to care.

JOSEPH DUMIT is the chair of performance studies and a professor of science and technology studies and of anthropology at the University of California Davis. He is an anthropologist of passions, brains, games, bodies, drugs, and facts. His research and teaching constantly ask how exactly we came to think, do, and speak the ways we do about ourselves and our world, and what are the actual material ways in which we come to encounter facts, conspiracies, and things and take them to be relevant to our lives and our futures. He is the author of *Picturing Personhood: Brain Scans and Biomedical America* (2004) and *Drugs for Life: How Pharmaceutical Companies Define Our Health* (Duke University Press, 2012), and coeditor of *Cyborgs and Citadels*, *Cyborg Babies*, and *Biomedicine as Culture*. He has written articles about neuroscience and play, irrational computers, patient experiences, difficult-to-define illnesses, and the history of medicine, and he was the managing editor of *Culture, Medicine and Psychiatry* for ten years. He holds a BA degree from Rice University and a PhD in the history of consciousness from the University of California Santa Cruz. His current research includes comparative anatomies and fascia via improvisation practice as research, the infernal alternatives of capitalism and health, three-dimensional visualization (virtual reality) environments for science, game studies, and data studies. Visit his website at http://dumit.net.

MELANIE FORD LEMUS is a PhD candidate in the department of anthropology at Rice University. Her dissertation research focuses on architectural interventions in the deep ravines (*los barrancos*) that compose nearly half of Guatemala City's terrain. Interested in the relationship between form, environment, and design, Melanie researches moments of encounter between ravine residents, urban planners, and architects to understand how they negotiate designs for a more socially and environmentally conscious urban future. Her research aims to strengthen insight into how Guatemala City attempts to reckon and ameliorate social and environmental issues that result from the instability, marginality, and violence of the twentieth century. At Rice University, Mel is a co-coordinator of the Ethnography Studio with Katie Ulrich and Dr. Andrea Ballestero, and a predoctoral fellow at the Center for Energy and Environmental Research in the Human Sciences (CENHS) at Rice University.

ELAINE GAN is an artist-scholar who teaches at the Center for Experimental Humanities and Social Engagement at New York University, where she also directs the Multispecies Worldbuilding Lab. Her practice engages with the fields of feminist science and technology studies, environmental arts and humanities, multispecies ethnography, and digital media. She is coeditor of an anthology titled *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene* (2017).

GRAHAM M. JONES is a cultural and linguistic anthropologist who explores how people use language and other media to enact expertise in practice, performance, and interaction. An associate professor of anthropology at the Massachusetts Institute of Technology, he teaches classes on a range of subjects including magic, science, and religion; education; play and games; communications technologies; and ethnographic methods. Jones's two monographs constitute a diptych: *Trade of the Tricks* (2011) describes day-to-day life and everyday talk within the insular subculture of contemporary French illusionists; *Magic's Reason* (2017) examines the meaning of magic in Western modernity, bridging the intellectual history of anthropology and the cultural history of popular entertainment.

TRINE MYGIND KORSBY is a postdoctoral researcher at Stanford University, where she works on a project on transnational crime and criminal livelihoods in Romania. She completed her PhD in anthropology with the Department of Anthropology, University of Copenhagen. Her recent publications include *The Brothel Phone Number: Infrastructures of Transnational Pimping in Eastern Romania* (2017), and the chapter "In the Workshop: Anthropology in a Collaborative Zone of Inquiry," cowritten with Anthony Stavrianakis and Paul Rabinow (in *The Composition of Anthropology*, 2018).

JUSTINE LAURENT, Oliver Human, Carolina Domínguez Guzmán, Els Roding, Ulrike Scholtes, Marianne de Laet, and Annemarie Mol are an Amsterdam-based team of researchers brought together by a shared sensitivity to contrasting as an analytical technique. They work on situated cases concerned with eating and bodies, excreting, sensing, and cleaning houses and cities, and relating to more-

than-humans, caring for clean water, and botanical gardens. They all engage with their cases, methods, and theories differently, but they share a practice of thinking through the specificities of their ethnographic spaces while resisting a clear division between theory and practice. They collaborate through conversations, workshops, supervisions and intervisions, walking seminars, cowriting, collective fieldwork, and dinners and lunches. During these collaborations, and outside of them, they cultivate their specificities, sometimes also through noting and discussing contrasts among themselves. While discussing potty training practices they noted not only contrasts within and between the stories but also contrasts between their takes on these stories. Calibrating such distinctions without erasing them is what the analytic technique of contrasting is about.

JAMES MAGUIRE is an anthropologist and assistant professor at the IT University of Copenhagen. His work has focused on the political, temporal, and environmental consequences of energy extraction, with a particular ethnographic focus on northern Europe. His current research examines the interrelationship between the digital and the environmental, paying particular attention to the production of digital infrastructures through the appropriation of environmental forms.

GEORGE E. MARCUS has been Chancellor's Professor of Anthropology at the University of California Irvine since 2005, when he inaugurated the Center for Ethnography (which he has since directed). For the twenty-five years preceding that, he was the chair of the Anthropology Department at Rice University, which in effect was for that entire period a sustained research/debate circle regarding anthropology's research practices and the momentum it received from the lively debates across disciplines about culture, language, and representation. *Writing Culture*, *Anthropology as Cultural Critique*, *Ethnography Through Thick & Thin*, and the *Late Editions* series of fin-de-siècle annuals are the participatory publications that mark that heady period. His interest in anthropological writing and research practices morphed in the early 2000s into the relationship between ethnographic methods and studio/design practices of various kinds and, more recently, digital technologies. His experimentation with intermediate forms of fieldwork, the nature of collaborations, the fate of "field notes," and the evolution of research careers beyond rite of passage projects of ethnography, and their forms of writing, have been his continuing concerns.

SARAH PINK is a professor and the director of the Emerging Technologies Research Lab at Monash University, Melbourne, Australia. Her research seeks to develop a dialogue between her academic scholarship, applied practice, and interdisciplinarity. Her recent team ethnography projects have been in Australia, the United Kingdom, Sweden, Spain, Brazil, and Indonesia. Publications from these projects include books, journal articles, an ethnographic film, and websites. Some examples of this work can be seen at www.laundrylives.com and www.energyanddigitalliving.com. Her recent collaboratively written and edited books include *Uncertainty and Possibility* (2018), *Refiguring Digital Visual Techniques* (2017), *Anthropologies and Futures* (2017), *Making Homes* (2017), and *Digital Ethnography: Principles and*

Practice (2016). In 2015 she codirected the ethnographic documentary *Laundry Lives*.

MARKUS RUDOLFI studied sociology, psychology, and human geography at the University of Jena and Goethe University Frankfurt, and he is a former member of the editorial board of the student-led magazine *Soziologiemagazin*. After his studies he worked as a lecturer in political education, as a high ropes instructor, and as a temporary helper at a mountain cottage in the Alps. In 2018 he joined the chair of cultural psychology and anthropology of knowledge at Ruhr-University Bochum, where he helped to build up the RUSTlab. He currently works as a research associate at the chair for interpretative social research at Goethe University Frankfurt, where he is engaged in a PhD project about conservation practices at a central European transboundary park.

ANTHONY STAVRIANAKIS is a researcher at the Centre National de la Recherche Scientifique, France. He is the coauthor, with Paul Rabinow, of *Demands of the Day: On the Logic of Anthropological Inquiry* (2013) and *Designs on the Contemporary: Anthropological Tests* (2014). He is currently engaged in two field projects: on assisted suicide in Switzerland and on care for people diagnosed with amyotrophic lateral sclerosis in Paris and San Francisco.

LUCY SUCHMAN is a professor of anthropology of science and technology in the Department of Sociology at Lancaster University. Before taking up her present post she was a principal scientist at Xerox's Palo Alto Research Center, where she spent twenty years as a researcher. She is the author of *Human-Machine Reconfigurations* (2007). Her current research extends her long-standing engagement with the fields of human-computer interaction and artificial intelligence into the domain of contemporary warfare, including the figurations that animate military training and simulation, and problems of "situational awareness" in in the context of increasingly automated weapon systems. She is concerned with the question of whose bodies are incorporated into these systems, how they are incorporated, and with what consequences for social justice and the possibility for a less violent world.

KATIE ULRICH is a PhD candidate in the Department of Anthropology at Rice University. Her research focuses on petrochemical replacements made from sugarcane and other plant sources, including not only biofuels but also biobased plastics, synthetic fabrics, solvents, specialty chemicals, and more. She is working with scientists and industry actors in Brazil who are researching new biotechnologies to expand the scope and scale of sugar-based alternatives to petrochemicals. Her project follows the technical practices of scientists, industry actors, and funding agents within and beyond the laboratory that reconfigure sugarcane molecularly, socially, and politically—and to what extent these practices ultimately transform sugarcane from a crop with a violent history into a feedstock for new environmental and industrial futures. At Rice she is a co-coordinator of the Ethnography Studio and a former predoctoral fellow at the Center for Energy and Environmental Research in the Human Sciences.

HELEN VERRAN considers that in ethnographic analysis is it often useful to refuse the Western commonsense understanding that the author in the flesh is ineluctably ontologically distinct from the author in the text. As an author in the flesh she is an old woman, University Professorial Fellow at Charles Darwin University in Australia's Northern Territory, and currently a visiting scholar at the Max Planck Institute for the History of Science in Berlin. As author in the text? Well, it is up to readers to judge. She is author of the prize-winning book *Science and an African Logic* (2001).

ELSE VOGEL works at the intersection of anthropology and science and technology studies. In her research she combines philosophical reflection with the empirical study of care practices, particularly those aimed at lifestyle change. She currently works as a postdoctoral researcher at the University of Amsterdam, the Netherlands, and as a research fellow at the University of Linköping, Sweden. In addition to teaching courses in anthropology and philosophy of science, she is conducting research on human-animal relations in intensive livestock production, with a focus on how veterinarians in this industry negotiate diverse values in caring for farm animals.

ANTONIA WALFORD is a lecturer in digital anthropology at University College London. Her work critically engages with the social and cultural implications of data and digitization practices, with a particular focus on the scientific data economy in the Brazilian Amazon. She previously held a position at the Centre for Social Data Science, University of Copenhagen, and was a research associate at the ESRC Centre for Research on Socio-Cultural Change (CRESC). She has published articles in journals including the *Journal of the Royal Anthropological Institute* and *Social Analysis*, and several book chapters, and she has coedited a number of collections on various topics, including one with Francis Dodsworth on the contemporary consequences of globalization, and one with Hannah Knox for *Cultural Anthropology* on whether there is an ontology to the digital.

KAREN WALTORP is an assistant professor of anthropology at Aarhus University and an award-winning filmmaker. Her research focuses on gender, Islam, visual and digital technologies, and new configurations of space and personhood related to new technologies. She works with long-term projects grounded in an experimental approach and collaborative methodologies and carries out fieldwork primarily in South Africa and Denmark. Waltorp is the author of *Why Muslim Women and Smartphones: Mirror Images* (2020), and her work has appeared in a range of anthropological and interdisciplinary journals including *Ethnos*, *Visual Anthropology*, and *International Communication Gazette*. She is the co-convener of the FAN: European Association for Social Anthropologists' Future Anthropologies Network, and is a coinvestigator on the three-year Aarhus University Research Foundation NOVA grant "ARTlife: Articulations of Life among Afghans in Denmark" (2017–20), working on collaborative filmmaking and web presence with a collective of Danish-Afghan women.

LAURA WATTS is a writer, poet, ethnographer of futures, and a senior lecturer in energy and society at Geography and the Lived Environment, Geosciences, University of Edinburgh. As a science and technology studies scholar, she concerns her research with the effect of "edge" landscapes on how the future is imagined and made and on methods for writing futures otherwise. For the past decade she has been working with people and places around both energy and data futures in the islands of Orkney, Scotland. Her latest book, *Energy at the End of the World: An Orkney Islands Saga*, was published in 2019.

BRIT ROSS WINTHEREIK is a professor of ethnography and science and technology studies, head of the Center for Digital Welfare, and affiliated with the Technologies in Practice research group at the IT University of Copenhagen. Her research focuses on digital data, welfare, infrastructures, data, energy, and accountability. She is cofounder of the Danish Association for Science and Technology Studies (www.dasts.dk), and the ETHOSLab (https://ethos.itu.dk). She is the coauthor, with Casper Bruun Jensen, of *Monitoring Movements in Development Aid: Recursive Infrastructures and Partnerships* (2013) and has published broadly across anthropology and STS.