

CRYSTAL BIRUK

COOKING

DATA

CULTURE & POLITICS IN AN AFRICAN RESEARCH WORLD



COOKING DATA

CRITICAL GLOBAL HEALTH

Evidence, Efficacy, Ethnography

A SERIES EDITED BY VINCANNE ADAMS

AND JOÃO BIEHL

COOKING DATA

Culture and Politics in
an African Research World

CRYSTAL BIRUK

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Cover art: Boxes of completed surveys in LSAM field office storage
room. Photo by Joshua Wood.

For my families, *everywhere*

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It was . . . necessary to be sure the African chosen would undertake his work efficiently and successfully, as with a period of only a few days to be employed, he might be tempted to sit under a banana tree and write the first figures which came into his head [on the census forms]. —C. J. Martin, “The East African Population Census, 1948”

INTRODUCTION

AN ANTHROPOLOGIST AMONG THE DEMOGRAPHERS

Assembling Data in Survey
Research Worlds

In 1948, C. J. Martin (1949, 315), director of the East African Statistical Department, speculated that African data collectors for the census in Uganda, Kenya, and Tanzania might invent the data they were meant to record. In mid-June 2008—sixty years later—I sat with a group of Malawian data collectors in a minibus parked in a village in central Malawi where they were administering household-level surveys for an American-led longitudinal cohort study, the Longitudinal Study of AIDS in Malawi (LSAM).¹ They had finished their work for the day and were conversing about one of their colleagues as he sat under a tree nearby, pencil in hand and head bent over a survey questionnaire. As he checked the questionnaire to ensure that each question had been answered by the respondent, those in the van jokingly accused him of “cooking data” (*kuphika madata*). Soon after the conversation, the minibus hurried back to the LSAM field office nearby, where the team’s completed questionnaires were deposited in cardboard boxes until the information they contained would be carefully entered into a growing database by a data entry team.

DATE OF INTERVIEW	[][] [][] (Day, Month)
TIME STARTED	[][] [][] (24 HOUR TIME)
INTERVIEWER NAME	[_____]
INTERVIEWER NUMBER	[][][][]

RESPONDENT'S IDENTIFICATION	
Village name and number _____	[][][][]
Headman's name _____	
Head of compound _____	
Respondent's name and Respondent ID _____	[_____]
Respondent's other names/nicknames _____	#living children _____
Respondent's level of education (circle and fill in level): (0) No school (1) Primary-Level____ (2) Secondary-Level____ (3) Higher	
Respondent's birthplace (District and Village) _____	
Respondent's father's name _____	
Respondent's age (estimate if respondent doesn't know) [][] Check if age was estimated by interviewer []	
Respondent's marital status 1....MARRIED 33...NEVER MARRIED 44...SEPARATED 55...DIVORCED 66...WIDOWED	
Husband's name _____	
Husband's other names/nicknames _____	
Husband's birthplace (District and village) _____	
Number of other wives that husband has _____	
Husband's level of education (circle and fill in level): (0) No school (1) Primary-level____ (2) Secondary-level____ (3) Higher	

	SUPERVISOR	LOGGED BY	CHECKED BY	ENTERED BY
INITIALS	_____	_____	_____	_____
DATE	_____	_____	_____	_____

FIGURE I.1. LSAM questionnaire, 2008.

Cooking data refers to fabricating, falsifying, or fudging the information one is meant to collect from survey respondents in a standardized and accurate manner. Martin's fears that enumerators might "write the first figures which came into [their] heads" on their forms reflect his stakes in the first endeavor to accurately map African populations in the territories his office oversaw, express racialized hierarchies of suspicion, and illustrate how data collectors' practices in the field might spoil census data that would later be analyzed in the office. Meanwhile, in 2008, the phrase "cooking data" operated among Malawian fieldworkers as playful commentary on colleagues' work performance, indicating that they had come to articulate and embody the habits, investments, and standards central to the collection of high-quality data, as imparted to them by American demographers during intensive pre-fieldwork training sessions. These two accounts point to the tensions between standardization and improvisation, and concerns about data quality that are at the core of this book and continue to preoccupy those who administer surveys in sub-Saharan Africa today. Amid demographers' interest in measuring and quantifying population-based phenomena—such as HIV/AIDS and other health issues—surveys like the ones administered by LSAM's fieldworkers are a major source of health-related evidence in sub-Saharan Africa. They act as localized sensors of a global system by feeding the demand for numbers on which to base evidence-based policy and practice (Cartwright and Hardie 2012; Adams 2013; Geissler 2015a, 15).

Cooked data are a specter that has long haunted survey projects by invoking ways in which data's future certainty and value as evidence might be unraveled by human error or deviations from the standards or recipes governing their collection. Adjectives such as "cooked" versus "raw" and "dirty" versus "clean" figure across multiple scales of data talk in survey research worlds: fieldworkers, demographers, data entry clerks, policy makers, and statisticians alike employ such terms to comment on the quality of quantitative data at various stages of their collection, analysis, and storage. While we tend to think of data as abstract and intangible, these vivid descriptors draw attention to their materiality and life course. Numbers, of course, come from somewhere. A careful consideration of the social lives of numbers, rather than viewing them as stable and objective measures of reality, provides crucial context for interpreting quantitative evidence that we often deem too big or too technical to wrap our heads around. As an ethnography of the production of quantitative data, this book encourages its readers to be a little bit less in awe of numbers by understanding them as "creatures that threaten to become

corrupted, lost, or meaningless if not properly cared for” (Ribes and Jackson 2013, 147). It also considers how the activities of data collection not only produce numbers but shape personhood, sociality, and truth claims.

Cooked data conjure their culinary opposite: raw data. Data are units of information (such as a number, response, or code written into a box on a survey page by a data collector) that, in aggregate form such as LSAM’s public-use database of survey data collected since 1998, might become evidence for policy making, public health interventions, academic analysis, or medical practice by government, nongovernmental organizations (NGOs), scholars, and other institutions in Malawi. Whereas actors in survey research worlds take raw data to be transparent or naked—that is, prior to analysis or interpretation—cooked data have been subjected to processes that shape or transform them in two main ways. In the first sense—the “cooking data” mentioned by the fieldworkers and Martin above—raw data become deformed, dirty, or useless through bad data practices and human error or other contingencies in the field. The most egregious—and mythologized—form of cooking data in the field occurs when a fieldworker fabricates numbers or fills out a survey willy-nilly.² In the second sense, cooked data are raw data that have been processed, organized, and analyzed according to demographic standards and norms; this form of cooking is codified and validated by experts and mostly takes place in the office once data arrive from the field.³ Talk of raw and cooked data recalls Lévi-Strauss’s (1969) classic study *The Raw and the Cooked*. He argues that the interplay between the categories raw and cooked is the building block of hundreds of myths found across many cultures and therefore forms the basic structure of human thought. Raw and cooked are heuristics that allow humans to differentiate what comes from nature and what is produced in and by human culture, including data.

An extensive literature authored by statisticians and survey researchers has aimed to diagnose, document, and mitigate instances of cooking or data fabrication by data collectors, both during and after collection (Crespi 1946; Finn and Ranchhod 2013; Waller 2013; Kennickell 2015), with a more recent contribution suggesting that data fabrication by fieldworkers might function as critical commentary on inequalities inherent to research projects in low-income countries or as an expression of low morale (Kingori and Gerrets 2016). However, accounts of data practices in the field take for granted a fundamental difference between raw and cooked data, a binary that I hope this book destabilizes. In titling this book *Cooking Data*, my intention is not to suggest that the data produced by survey projects are fabricated or falsified, nor is it to provide advice to researchers about how to mitigate cooking among

fieldworkers. This book shows how all data—even that verified as clean by demographers—are cooked by the processes and practices of production.

I view survey research worlds as embedded in a heterogeneous social field inhabited by people whose practices, rhetoric, and relations are informed by epistemic conventions that underlie what the collection of good, clean data is supposed to be. I suggest that it is in the field where surveys are administered—rather than in researchers’ offices—that we can gain insight into what research means for the people who are tasked with collecting data by asking respondents questions and for those who have to answer the questions, as well as what kinds of worlds and persons it brings into being. In Malawi, this book shows, the effort to render the AIDS epidemic and its context visible and knowable to a demographic or global health gaze is constitutive of, and entangled with, attempts by fieldworkers and research subjects to achieve their own interests as members of a research world.

As an explicit expression and validation of underlying disciplinary norms or virtues, data talk and the units of information it comments on are not unlike Lévi-Strauss’s myths. Data and myths are both anonymized artifacts of collective labor and seem to “come from nowhere” (Lévi-Strauss 1969, 18); consider how the wide circulation of statistics as the collective currency of policy makers and statisticians reinforces a kind of mythology that takes information as objective, free-floating, abstract, and universal (Poovey 1998, xii; Bowker 2005, 73). Take, for example, the claim made by two demographers who analyzed LSAM’s survey data in an article published in a major HIV/AIDS research journal that “only 15.6 % of women and 8.1 % of men did not share their HIV test result with their spouse” (Anglewicz and Chintsanya 2011). This statement paints a particular picture of Malawian social life and garners legitimacy not only from the numbers it cites, but also from the respectable and long-standing data set from which the numbers are extracted. How did these numbers get all the way from the field in Malawi into the pages of a journal? What is their life story? This book demystifies data by tracing their life course and travels amid and with human and nonhuman actors whose heterogeneous work constitutes caring for data. *Cooking Data* foregrounds the social transactions that characterize survey research worlds all the way from the collection of raw data to the presentation of evidence in policy.

I borrow the phrase “cooking data” from my informants—both Malawian fieldworkers and survey researchers—to open an analytical space for the central questions of this book: How do raw units of information—numbers written onto a questionnaire by data collectors—acquire value as statistics that inform national AIDS policy and interventions? How do on-the-ground

dynamics and practices of survey research cultures mediate the production of numbers? Finally, how are quantitative health data and their social worlds coproduced and with what consequences for local economies, formulations of expertise, and lived experience? In attempting to answer these questions, I draw theoretical inspiration from science and technology studies and critical medical anthropology to illustrate how the lives of data and the lives of those who produce it in one of the poorest countries of the world are impossible to disentangle; data reflect and cohere new social relations, persons, practices, forms of expertise, and expectations. Following recent scholarship in postcolonial science studies, in this book I track how the survey project—a particular kind of socioscientific assemblage—travels; I also consider what matters to whom about research conducted in resource poor contexts. Finally, I show how survey projects, following a long legacy of scientific and development projects dating from the colonial period, are inevitably messier and less comprehensive endeavors than we might expect (Tilley 2007, 2). The blank first page of LSAM's 2008 questionnaire that precedes this introduction invites future respondents' answers; likewise, I invite the reader to join me as I track the travels of data in survey research worlds.

Demographers' Dreams: The Assembly Line of Data

The chapters that follow explore the everyday relations between persons, data, technologies, and infrastructures that temporarily transform parts of Malawi into a field of demographic health research. Foreign survey researchers—demographers, economists, and sociologists such as those affiliated with LSAM—working in Malawi necessarily share responsibility for the quality of data collected with many collaborators, all with different interests in research: Malawian research partners, fieldworkers, HIV testing and counseling teams, data entry clerks, and research participants, for example. As is elaborated in chapter 4, raw information collected by workers in the field may be edited to remove assumptions and ambiguity as it is assembled, making data seem better or more certain than it actually is and enhancing its performative capacity and citability (Latour and Woolgar 1979; Bledsoe 2002, 130; Espeland and Stevens 2008, 421–422; Sana and Weinreb 2008, Tichenor 2017). In their polished form, data reflect the capacity and expertise of all of their handlers, even if epistemic rhetoric and metrics for good data tend to obscure the degree of uncertainty absorbed by data in their travels (March and Simon 1958, 165).

Survey research entails long periods of data collection in the field and confronts epistemic threats from start (survey design) to finish (good numbers

ensconced in a database): mistranslation of questionnaires, poorly trained interviewers, respondents who lie, respondents who refuse to participate or who cannot be found, poor weather conditions, inaccurate data entry, and lost data. Making quantitative data demands designing and implementing a material and human infrastructure—a machinery of knowledge production—that requires managing the unruly people, places, and things that characterize fieldwork, a messy outdoor scientific activity (Kuklick and Kohler 1996; Knorr-Cetina 1999; Ribes and Jackson 2013). These efforts are costly in time and money; in 2008, for example, data collection activities, including data entry, took 70 percent of the survey-based Marriage and Youth Project's (MAYP, discussed below) total project budget. Efforts at standardization and harmonization symbolized by the creation of a streamlined survey script to be administered by fieldworkers serve the goal of clean and high-quality data: data that are accurate, reliable, efficiently and ethically collected, and representative of sufficiently large and bounded samples over time. Indeed, survey researchers employ the term “quality assurance” to consider ways that data processes align or depart from predefined operational standards (Usten et al. 2005; Lyberg and Biemer 2008). As we will see in chapter 1, survey researchers endorse a shared set of epistemic virtues that ensure the data they collect will be deemed objective, clean, and consumable (Daston and Galison 2010).

Throughout, the book foregrounds data's materiality and social lives as they move along what demographers imagine to be an assembly line of human and nonhuman actors. Survey researchers themselves take interest in the many stages of a survey, typically bookended by establishing the structure of the study at its birth (usually in a proposal for funding) and ending with the dissemination of findings drawn from the data (Pennell, Levenstein, and Lee 2010). They determine how to best document the production of data at all stages to help data users assess data quality, defined as the degree to which data conforms to requirements agreed upon by producers and users. While demographers may idealize data activities as a kind of assembly-line process that produces identical widgets or units of information, this book shows that survey research activities and data production look more like a life course in practice—where any individual datum results from an unfolding series of transactions, experiences, and relations.

The assembly line—associated with Henry Ford's introduction of the continuously moving technology to mass produce standardized goods—is a compelling image for thinking through and tracing data's travels. First, the Fordist assembly-line process subordinated human skill or creativity by training workers at one station to do the same repetitive task over and over

again; the prefieldwork training sessions for Malawian fieldworkers discussed in chapters 2 and 4 likewise aim to harmonize the practices and procedures that constitute the data collection phase of research, characterized by administration of the same survey in the same manner to different respondents over and over again. Indeed, demographers and survey researchers in other disciplines generally view fieldworkers as a liability, harboring suspicions about the ability of the fieldworkers to do the work well and their potential to mess up data collection by cooking or fabricating data (True, Alexander, and Richman 2011). Fieldworkers across time and space are consistently framed by survey researchers as unreliable, as prone to cheating or cutting corners when collecting data, and as suspicious, thus requiring close surveillance to prevent unwanted edits to data in the field (Crespi 1946; AAPOR 2003; Biemer and Lyberg 2003; Sana and Weinreb 2008; Spagat 2010; Finn and Ranchhod 2013).

Yet, even as project design tools and survey instruments predetermine and limit the actions of fieldworkers, these individuals improvise, reinvent, and improve upon standards as they implement them in the field, far from the researchers' eyes and ears. As this book shows, making good data requires creativity and tinkering as much as it does harmonization and consistency. One major interest in writing this book is to present fieldworkers—often cast as unskilled laborers—as central actors in the story of the production of data. Intermediary local actors such as these have long been eclipsed in accounts of (post)colonial science that cast heroic scientists and Western experts as drivers of knowledge production, though anthropologists and historians have aimed to foreground the maneuverings, knowledge practices, and experiences of a wide variety of middle men and invisible technicians, including fieldworkers (Shapin 1989; Schumaker 2001; Raj 2007; Watkins and Swidler 2012; Bank and Bank 2013; Kingori 2013; Molyneux et al. 2013; Graboyes 2015; Maes 2015; du Plessis and Lorway 2016; Jacobs 2016).

Data collectors have long been portrayed as interchangeable with one another, and often do the grunt work or dirty work of survey research, including trudging from house to house in the field, collecting information, stool, urine, or blood samples, and so on. This book demonstrates that it is the creative and innovative tactics of fieldworkers that ensure that data collection proceeds smoothly, and their artful negotiation between top-down standards and bottom-up particularities—a kind of cooking data—that produces clean data as arbitrated by survey research standards. For this reason, three of the book's five empirical chapters center on the practices and interests of fieldworkers, taking the knowledge work they perform on a daily basis seriously as a form of expertise that emerges from their interactions with data and experience in

the field—the spatial anchor from which much global health knowledge today emerges. Not unlike its construction in anthropology, the demographic field is the practical basis of analytical discourse (Fabian [1983] 2002, 21).

Researching Research in Malawi

This book is an ethnography of survey research projects that were collecting household-level data in Malawi in 2005 and 2007–2008. Driven by demand for current and detailed demographic and socioeconomic data on households in developing countries, and on the characteristics of those who live in those households, the data collected by these projects are a key source of evidence for economic and social policy analysis, development planning, program management, and decision making. The household survey has become the predominant mechanism for collecting information on populations in such contexts. I spent time with four projects working across the southern and central portions of the country in five districts. The book draws principally on fieldwork conducted with two projects: *LSAM* and *MAYP*. Both were collecting survey data and HIV tests in multiple waves from samples of thousands of Malawians, most of whom live in rural areas. Data from *LSAM* have tracked demographic, socioeconomic, and health conditions in rural Malawi, and *MAYP* data track a sample of young adults as they transition to marriage. As the longest-standing cohort study in the sub-Saharan African context, *LSAM*'s data set begins in 1998, the first year it undertook field research in-country; since then, there have been six more survey waves, the last in 2012. From 2007–2009, *MAYP* collected data in three waves.

The book also incorporates ethnographic insights drawn from my fieldwork with two other projects: the Girls Schooling Intervention Project (*GSIP*) and the Religion and Malawi (*RAM*) project. A cash-incentives experimental study targeting girls of school-going age, *GSIP* also collected survey data and conducted HIV tests. The other, *RAM*, was a snowball-sampling-driven project collecting qualitative (interview and focus groups) and quantitative (questionnaire) data from religious leaders and church and mosque members in periurban southern Malawi that sheds light on the role of religious leaders in educating members of their churches and mosques about HIV/AIDS. While the bulk of ethnographic data in the book draws from the time I spent with *LSAM* and *MAYP*, some anecdotes and insights, as noted in the text, come from my time with *GSIP* and *RAM*. (See table I.1.)

In 2005, I first spent three months as a graduate student research assistant to *LSAM*, where my primary work was aiding with everyday research tasks

TABLE 1.1 Survey Project Information

<i>Project</i>	<i>Sample Size and Characteristics</i>	<i>Data Collected</i>
LSAM	4,036 (2,361 women, 1,675 men)	Survey data, HIV tests, anthropometric data (height, weight, BMI)
MAYP	1,185 (598 women, 587 men)	Survey data, interview data, HIV tests
GSIP	3,810 young women	Survey data, interview data, HIV tests, health facility assessments, school and market surveys
RAM	620 men and women (80 religious leaders, 508 members of religious groups, 32 people living with HIV/AIDS, and 24 focus groups with religious leaders and religious group members)	Survey data, interview data, focus group discussion data

Source: Compiled by the author.

and overseeing a side project headed by a Malawian demographer that aimed to inventory cultural practices and their relationship to HIV risk across three districts in Malawi. I began to take interest in the culture and politics of survey research worlds and to formulate the research questions that animate this book. My relationships with LSAM principal investigators and Malawian researchers then led me to the other projects that agreed to host me in 2007–2008. American and European demographers headed LSAM, MAYP, and GSIP in collaboration with Malawian coprincipal investigators. All aimed to collect data that would shed light on social and economic trends over time relevant for understanding the trajectory of Malawi’s AIDS epidemic, one of the most severe in the world. The fourth study, RAM, was led by two American researchers with PhDs in nursing whose work and institutional affiliations were aligned with global health nursing and who sought to understand what kinds of information religious leaders disseminated to their congregations about HIV/AIDS. All four projects employed Malawian fieldwork supervisors, data collectors, and data entry clerks for the duration of their fieldwork periods.

I participated in all aspects of fieldwork including survey design meetings, the recruitment and training of project staff, everyday fieldwork practices such as checking questionnaires with data collection teams, evening social events, trips to the airport to collect shipments of HIV test kits or other

equipment, mapping exercises, data entry, and transcribing interviews. During data collection for each project, I lived alongside or with members of research teams. I spent the most consecutive time in the field with and around LSAM (three months in 2005 and then five months in 2008) and MAYP (three months in 2008). In addition to being a participant-observer during data collection, I also spent an extra month living in LSAM's and MAYP's sampling areas (Balaka and Salima, respectively) after the projects had departed in order to interview people living in recently surveyed households with my research assistant. While I initially planned to spend time only with LSAM, my broad interest in the politics of collaborative research and data collection led me to include the other projects in my research design so as to provide comparative context and to capitalize on the different tempos and data collection schedules of each project, all of which spent at least a few months engaged in fieldwork during the time span I was in Malawi. When I was not in the field with survey teams, I attended AIDS conferences and workshops where AIDS policy was discussed as well as interviewing a wide range of people involved in the world of AIDS research in Malawi, including research participants, chiefs and other traditional authorities, researchers, policy makers, government ministers, institutional review board (IRB) members, NGO staff, and district officials. Finally, I spent time in the Malawi National Archives reading documents, correspondence, and papers related to survey projects implemented in colonial Nyasaland. These censuses, surveys, and other enumerative efforts administered since the 1930s in Malawi provide useful historical context for my discussions of present-day surveys.

Throughout the book, I use the term “demographer” to refer to the core American, European, and Malawian researchers who were involved with LSAM, MAYP, and GSIP. Of those I interacted with most (thirteen), six held or were pursuing MAs or PhDs in economics, two in sociology, and five in demography. What unifies these researchers is their investment in the survey as a key tool in collecting data that will shed light on population dynamics, economic trends in rural Malawi, health issues, and the effects of the HIV epidemic on each of these. The questionnaire—in its imperative to collect standardized information that can be converted into numbers—is the base of these researchers' future analysis of a clean quantitative data set, to be followed by the dissemination of their results through journal articles, books, conferences, and other venues.

Demographers who were in academia at the time of this research were based at population studies or global health centers at the University of Malawi or American universities or, since few universities give degrees in de-

mography, in other social science departments, primarily economics and sociology (Riley and McCarthy 2003; Cordell 2010). Three of the demographers were based at the World Bank at the time of my research in 2007–2008. Chapter 1 elaborates on how demographers render the statistical household to communicate differences in populations across time and space, an agenda I suggest is at the core of the discipline and unifies the researchers and others who produce and utilize the data sets discussed in this book (see appendix 2 for a sample household roster page from LSAM’s 2008 survey that is representative of the same tool as implemented by MAYP and GSIP, as well). In the section that follows—and in chapter 1—I sketch an ideal-type demography that fails to capture the complexity and diversity of persons trained in this discipline, but nonetheless provides a heuristic sense of the general commitments of demographers for the reader; in this endeavor, I find Susan Watkins’s (1993) term “the culture of [demography]” and Saul Halfon’s (2006) term “population-based epistemic community” useful entry points. While culture(s) are unstable and dynamic, one can nonetheless extract patterns via ethnographic study of a discipline’s thought, practices, and products.⁴

Demography and HIV/AIDS in Southern Africa

By 1998, more than two-thirds of the people living with HIV resided in sub-Saharan Africa, and by 2002, HIV/AIDS had become the leading cause of death for both men and women aged fifteen to fifty-nine globally (Carael and Glynn 2008, vii). Once it was realized that there was an AIDS epidemic and that it was worst in southern Africa, where Malawi is located, international organizations flooded into the region to attempt to stem the tide of the epidemic. Researchers contributed to these efforts by producing and disseminating knowledge of the ways that HIV can be prevented, treated, and contained. Rural Malawians widely associate the term “AIDS” with the Chichewa term for research (*kafukufuku*, notably used also to mean survey), pointing to the history of efforts since the 1990s, usually by outsiders, to document and thus contain the HIV virus through the collection of information, anthropomorphic data, and bodily fluids.

Approximately 10 percent of Malawi’s population of 16.9 million is HIV positive, and it is ranked 173 of 188 countries on the Human Development Index (UNDP 2015). The mostly rural population engages in small-scale farming and depends heavily on rain-fed agriculture to grow maize to prepare the staple food dish, *nsima*. Subsistence agriculture is complemented by growing

small cash crops (mostly tobacco and cotton), casual agricultural labor, and selling vegetables and secondhand clothing.

The projects discussed in this book all take up HIV/AIDS as a central indicator in the data they collect. Zuberi et al. (2003, 472) suggest that the rise in AIDS mortality is the most important feature of African population since the early 1990s, particularly in southern and eastern Africa, making population-based surveys and HIV testing important tools through which to know and measure the significant impact of HIV on rural Malawians' lives (Garenne 2011). Although Malawi's "silent epidemic" probably began before 1980—the first case was diagnosed in 1985—a strict ban imposed by postindependence life president Dr. Kamuzu Banda on discussing (or researching) family planning (until 1982) or social problems that would challenge his discourse of Malawi as his land of milk and honey prevented the topic from becoming a point of public discussion until much later (Kerr and Mapanje 2002; GoM 2003; Lwanda 2005; Illife 2006). Pushed by the Global Program on AIDS in Geneva and by Western donors, Banda did establish a short-term plan to contain AIDS by mid-1987 and set up the National AIDS Control Programme in 1989, but its mandate and objectives were impeded by political stagnancy (Wangel 1995). It was only after democratization in 1994, when Banda lost the election and newly elected president Bakili Muluzi publicly prioritized AIDS, that international organizations began unimpeded and intensive work in this arena, eventually complemented by an enhanced governmental response led by the National AIDS Commission (NAC), established in 2001 as a condition for receiving World Bank funding for AIDS (Putzel 2004). The NAC has since overseen AIDS prevention and care initiatives and coordinated the country's AIDS response.⁵ Today, Malawi's AIDS budget continues to rely on international sources, with funds flowing from the World Bank, Global Fund, WHO/UNAIDS, and the President's Emergency Plan for AIDS Relief (PEPFAR), among many others.

The social sciences have played a central role in formulating policy and interventions into the AIDS epidemic in Malawi. Since the early 1990s, research has focused on assessing, among other things, AIDS-related beliefs, attitudes, and practices; determining the economic effects of HIV on the population; documenting support networks' care strategies for infected individuals; identifying a wide variety of ever-shifting risk groups (adolescent girls, truck drivers, sex workers, migrant laborers, and today's key populations, such as men who have sex with men); understanding low rates of condom use and/or family planning; and determining the feasibility and impact of HIV

prevention and treatment efforts, lately male circumcision and distribution of antiretroviral therapy (McAuliffe 1994; Bisika and Kakhongwe 1995; Chirwa 1997; Illife 2006; GoM 2015).

The HIV virus interacts maliciously with tuberculosis, malaria, and bacterial infections and has significantly affected social and economic life in Africa. The impact of AIDS on social institutions in southern and eastern Africa has triggered interest in infectious disease, as manifest in the Global Fund to Fight AIDS, Tuberculosis and Malaria and several other global health initiatives. Anthropologists have documented the burgeoning projectification of the African landscape, with exceptional focus on AIDS (Nguyen 2010; Crane 2013; Dionne, Gerland, and Watkins 2013; Meinert and Whyte 2014; Prince 2014; Benton 2015; Moyer 2015); a body of excellent work in critical global health studies has examined how resource-poor settings become central sites for the rise of global health science that unfolds in clinics, trials, laboratories, and hospitals, particularly amid what Watkins and Swidler (2012) term “the AIDS enterprise.”

This book builds on this scholarship but takes readers outside the wards, laboratories, and offices of global health and into the field that is the site of survey research. Understanding the population impact and dynamics of infectious disease is crucial to global health efforts to reduce morbidity and mortality and for decisions on where to best direct resources; data collected, cleaned, and analyzed by demographers plays a key role in untangling these variables and is vital to the measurement and practice of development in Africa. Indeed, many of the cooperative formations and partnerships between states, parastatals, and other organizations that fall broadly under the headings “development” and “global health” in Africa take as their main goal the achievement of indicators or targets that evaluate severity of health or economic conditions in a population over time, with AIDS as a central concern. Close scrutiny of the everyday socioscientific practices of survey research worlds can thus shed useful light on the politics of making numbers amid the rise of data-driven global health research in Africa.

An Ethnographer in Demographyland

I met with Richard Castells, a WHO epidemiologist, at Giraffe Lodge, a twenty-minute kabaza journey from LSAM’s field headquarters in Balaka District. With another American epidemiologist, he has been commissioned by NAC to develop a new AIDS prevention strategy in

collaboration with a local consultant. He is in Malawi for a short time to gather data from reports, interest groups, and interviews. . . . I noticed that Richard prefaced a lot of his sentences with “One thing I’ve noticed just from looking at the data . . .” I think this works to give him a kind of numerical authority that helps to obscure the fact that he has spent little to no time in Malawi, but lots of time amid numbers and statistics from “Malawi.”⁶

A close reading of this excerpt from my field notes illuminates the enduring chasm between anthropology and the more quantitative applied and practical sciences. Richard, by virtue of his disciplinary training as an epidemiologist, holds intellectual interests and commitments very different from my own. Even in the semiprivate genre of field notes, I perform a boundary between Richard and myself: I have been in Malawi for a long time, Richard for a short time. I make clear that I took a local form of transportation to the lodge (*kabaza*, bicycle taxi), and leave unmarked that Richard likely traveled there in an air-conditioned SUV from the capital. I view our meeting as potential data (e.g., “I noticed that . . .,” the act of recording field notes soon after the meeting), whereas Richard likely did not write up field notes after we parted. Richard, too, nods to our difference when he implies a contrast between his “*just . . . looking at the data*” and the kind of things I have been up to for over a year at this point in Malawi. Finally, my prose emphasizes the difference between an anthropological approach to Malawi (spending time in-country) and a demographic, expedient one (spending “lots of time amid numbers and statistics” that, in my view, will only ever capture a partial and scare-quoted “Malawi”).

In 2007–2008, as an ethnographer of survey research worlds in Malawi, I came to identify as an anthropologist among the demographers, playing on Bernard Cohn’s (1987) elaboration of the differences between the culture, forms of expertise, and even modes of dress of “Anthropologyland” and “Historyland.” Like Cohn, I recognized myself as a sympathetic outsider to practitioners and thinkers from a discipline whose goals were at odds with the tenets anthropologists hold dear. I did not become a demographer, even if I did learn better how to see and think like one. I “played the stranger” to the culture of demography by “adopting a calculated and informed suspension of [my] taken-for-granted perceptions” of demographic practice and its products (Shapin and Schaffer 1985, 6). My own distrust of numbers aligned unexpectedly with some (certainly not all) demographers’ explicit recognition that their data are fraught with limitations. The acknowledgment