“Who will do research on you?” One of Crystal Biruk’s respondents jokes, as she explains her intention to study demographic research on HIV/AIDS in Malawi. This brilliantly captures the layered nature of *Cooking Data*, a book that begins by destabilising the hegemony of numbers as evidence *par excellence* in global health circles, and ends with a critical reflection on anthropological knowledge production. The book is an engaging ethnography of the “social lives” of numbers produced by demographers’ surveys in rural Malawi, with a particular focus on the fieldworkers tasked with the collection of the data. Fieldworkers are emblematic of researchers’ anxieties about “dirty data”, with supervisors warned to check that they are not sitting under trees fabricating survey responses, or “cooking data”. Yet by following the social life of surveys, Biruk shows how it is precisely through fieldworkers’ “creative and innovative” tactics, that it is possible to generate what is accepted as clean data. This insight holds the key to the major empirical contribution of the book, namely its effort to show through detailed ethnographic material, that numbers are artefacts, the result of negotiations amongst a multitude of actors at different stages of survey design, administration and analysis. *Cooking Data* therefore challenges the very notion of “clean data”, which envisions numbers as reflective of an objective truth and therefore as authoritative evidence for making policy decisions.

*Cooking Data* is not a takedown of quantitative approaches or an effort to expose the pitfalls of demographic research but rather an effort to examine how different forms of evidence gain legitimacy and the “criteria and metrics that underscore data’s production and consumption” (26). Pulling the curtain on the production of quantitative data, Biruk shows how all data is cooked, in the sense that its production and meaning are mediated by dynamics in the field and by research cultures. Interweaving original empirical observations on the social life of survey research with reflexive considerations on the role of the anthropologist in this field pushes this book beyond a simple revisiting of old epistemological debates. *Cooking Data* will be of great interest to those studying the social worlds that structure global health research, but it also has deeper implications for the possibilities of interdisciplinary collaboration and the role and purposes of anthropological critique.

In Chapter 1, we are invited into the researchers’ offices as different kinds of actors and knowledge brokers negotiate the design of a survey. Survey forms arrive in Malawi largely finalised, reflecting the predilections of Western academics, but local experts are engaged to translate questions and ensure instruments will generate the kinds of responses that researchers are looking for. Following these processes through Biruk’s observant narrative, we see how they produce the field as a place of “difference, distance and complexity” (35), juxtaposed with the office, where the messiness of the field is rendered measurable. Culture belongs to the field, in this vision, whilst the survey is acultural. Yet, instruments like steps diagrams to enable participants to determine their relative wealth reflect researchers’ assumptions of who the respondents are and what will be intelligible to them. Negotiations over meaning and efforts to make the field measurable by standardised metrics show how multiple interests coalesce in the production of questionnaires. In other words, Biruk shows how surveys are designed to capture reality but in doing so they model the reality
demographers want to see: “the survey forecloses alternative optic possibilities so that data will be clean and valuable” (63).

Once the survey is ready to be administered, the separation between field and office is further reified by the protagonists of Biruk’s story: the fieldworkers. Professionals in an economy where research work is a form of “contemporary migrant labour” (94), fieldworkers move from research project to research project. In so doing, they perform boundary work to cement their position as knowledge workers. Trainings for fieldworkers, which emphasise the different culture and practices they are likely to encounter, draw sharp distinctions between them and their participants. Urban fieldworkers perform this difference through micro-practices such as changing in and out of clothes appropriate for the field location. By placing normally invisible workers at the centre of the story about research, Biruk shows how these projects create “identities, dreams and social boundaries” (74) as fieldworkers navigate their precarious employment by embodying the “difference and distance between knowers and known” (99).

Following the daily negotiations of fieldworkers in their encounters with participants, Cooking Data weighs in on long-standing debates about research ethics and the tensions between standardisation and the complexity of the experience they aim to capture. Debates about what is ethically acceptable as compensation for participation in research in developing countries often point to a chasm between local culture and Western ethical standards. Biruk’s discussion of disagreements about the acceptability of soap given to survey participants exposes the inadequacy of this approach. The disappointment and expectations of reciprocity expressed by participants cannot be reduced to an analysis of Malawi as a “gift society”: they require us to consider how research projects become implicated in moral economies of distribution and the reproduction of global inequality. These negotiations as fieldworkers and participants meet in the field show how data are “malleable entities, perhaps more representative of negotiated research encounters than the rural reality they sought to represent” (138). This is clear for example as fieldworkers’ try to get participants to quantify the likelihood of different uncertain events by counting beans. When respondents show reluctance to use the beans or to engage in probabilistic reasoning, fieldworkers struggle to improvise and to sensitively encourage participants to fulfil the criteria of the survey in order to protect the “epistemological investments of their employers” (131).

In the final empirical chapter, Cooking Data shows us how the numbers produced by research are re-packaged as evidence as the analysis of the data is presented at conferences to influence policy. In these spaces, the social and political legitimacy of particular explanations becomes more important than the numbers themselves, as shown for example by the rejection of data showing high HIV prevalence amongst Men who have Sex with Men (MSM). This is contrasted with a researcher’s commitment to including harmful traditional practices as a risk factor in presentations that effectively influence policy despite the lack of numbers supporting this conclusion. How numbers become evidence (or not) therefore is a final step in a complex process of social mediation. Whilst the chapter focuses on what is rendered visible or otherwise in Malawian policy spaces, the argument could just as easily be extended to international policy-making forums. The global hierarchies that are reproduced by lopsided research collaborations between the Western and Malawian
researchers described in *Cooking Data* are magnified in agenda-setting processes in international arenas.

The involvement of anthropologists in the response to the West African Ebola outbreak of 2014-2016 has reinvigorated debates about the role of qualitative research in global health interventions, the possibilities of interdisciplinary collaboration and, more fundamentally, the nature of what counts as evidence. Crystal Biruk’s *Cooking Data* provides a timely and compelling contribution in her conclusions about “Anthropology in and of (critical) global health”. The function of anthropologists in providing local context to support global health interventions is often an uncomfortable one, which offers fruitful avenues for critique. However, mirroring her analysis of the production of quantitative data, Biruk unpicks the primacy of critique in anthropology and reflects on the ways in which just like surveys, ethnographic encounters also make new subjects and produce theory that abstracts from those relations. As critical development and medical anthropology have chronicled the failures of projects for the last decades, she notes, we must acknowledge that they have also provided “an archive of anthropologists’ own continued failures to be useful” (210).

*Cooking Data* ends by suggesting more productive modes of critique, imagining ways to maintain critical distance whilst recognising how we are implicated in the relations we describe. Being a “caring critic”, reflecting on the worlds that are made through global health interventions and considering the different stories that can be told help us recognise the commonalities and shared purposes between demographers and anthropologists. This is healthy, not least given increasing interest by institutions such as the World Health Organisation to integrate qualitative approaches to inform interventions. However, if we want to move beyond an impasse between being exclusively critics on the outside or “fire fighters” and cultural brokers on the inside, it is important to continue debating collectively the parameters of these contributions.