MAT @ Medicine Anthropology Theory

INTERVENTIONS

Worlds in a bottle An object-centered ethnography for global health

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Abstract

In this article, I call for an object-centered ethnography to illuminate the ontological multiplicity that marks the worlds of health and healing that people inhabit. Focusing on a sports-drink bottle filled with a remedy from a faith healer in rural South Africa, I explore the 'partial connections' that link the world of global health and the world of traditional healing through objects and bodies. Drawing on medical anthropology focused on global health and medical pluralism as well as scholarship from the ontological turn, I argue that global health programs are limited by their failure to recognize the ontological multiplicity their target populations inhabit.

Keywords

global health, ontology, South Africa, ethnography, multiplicity

In December of 2015, we stopped at a mountainside homestead in a rural area locally known as Pholela in KwaZulu-Natal, South Africa. This was the place where I had been conducting research with Thokozile Nguse, my long-term research assistant and collaborator, since 2008. It is a place on the margins of global health interventions, where international donors fund pharmaceutical treatments for diseases like HIV/AIDS and where the billboards put up by nongovernmental organizations remind people that practicing safe sex is the key to preventing its transmission. In 2015, we were conducting a survey about access to health

care when we learned that our old friends and cherished informants, Mkhulu and Gogo Hlela (Grandpa and Grandma Hlela), were sick.¹

When Thokozile and I arrived at their homestead, we knew instantly that something was wrong. From what passes as a road on this steep hillside, their tidy home was almost unrecognizable. The gate had fallen and the grass, which had always been cropped tight to the ground thanks to a few sheep, had grown up so high we could no longer see the path. As we approached, Gogo Hlela emerged from her unkempt garden with her grandson. She welcomed us with a pained expression that told us much about her past couple of months.

As we followed, she carefully climbed a short embankment, leaning heavily on a cane. Together we entered the square mud-brick building where Mkhulu lay. He greeted us warmly, moving out of his pain for just a moment, while Gogo struggled to take a seat on her woven mat in the corner. As we began to talk about their recent health problems, Gogo erupted into a coughing fit that left her gasping for air.

She choked out a couple of words to ask her grandson to fetch a Lucozade-branded sportsdrink bottle. When he returned, Gogo took a couple of sips of the *umuthi* in the bottle and her cough subsided. Once she caught her breath, she told us about all of her health problems, from her sore and swollen legs to her hypertension to a new heart problem. As she went through the list, she explained that doctors at the big public hospital in the provincial capital had diagnosed her and that she was receiving pills from the mobile clinic to treat her various ailments.

Because she hadn't mentioned it, we asked Gogo about her cough and she said she'd had it for a while, but it was getting better. She told us that she had *idliso*, a well-known witchcraft illness. She explained that when she had first taken the *umuthi* in the Lucozade bottle, it made her throw up. When she threw up, out came a piece of 'meat', or something like it, which was proof of *idliso*. She had done this twice and she was beginning to feel better. The cessation of her cough that afternoon was proof.

Lucozade is a popular sports drink in South Africa, much like Powerade or Gatorade in the United States. It is billed as an 'energy drink'. Packed with caffeine, carbohydrates, sugar, and salt, this drink promises to give consumers a pick-me-up and rebalance their electrolytes after a workout or when their low on energy.² It is nutritional science and modern food chemistry for sale in a small plastic bottle and it is available at a price in shops in even the

¹ For more on this project, see Neely and Ponshunmugam (2019).

² From the Lucozade website, accessed 5 February 2018. <u>https://www.lucozade.com/</u>.

most remote corners of South Africa. The bottle from which Gogo Hlela sipped her *umuthi* was a reminder that homesteads in Pholela have long been connected to international flows of commodities, science, and technology.

This red bottle with the yellow lettering also contained a cure for *idliso*, a holy water given to Gogo Hlela by an *umthandazi* (a faith healer), blessed by the church, and containing the power of the ancestors. This *umuthi* in the Lucozade bottle was a cure for Gogo's witchcraft illness. Though related to her health, this was clearly something different from the energy drink that had formerly occupied the bottle. It was something from a different world, one in which angry neighbors can make people sick and in which a healer, like an *umthandazi* who works with the ancestors, can make people better. But this other world was not entirely disconnected from the world of sports and nutritional science and the flows of global capitalism that had produced the bottle that contained the *umuthi*. The full package – this high-tech sports-drink bottle and its *umuthi* contents – reveals the ways that Pholela's residents occupy multiple, intersecting worlds of health and healing.

Medical anthropology has much to offer to help think through the importance of Gogo Hlela's *umuthi*-filled Lucozade bottle for understanding health and healing on the periphery of global health. In particular, two branches – literature on medical pluralism and literature on global health – offer ways to understand the multiple healing systems that Pholela's residents access, as well as the ways that international development, neocolonial processes, and neoliberalism come together through global health projects and the scientific medicine they propagate. Together, these literatures help to explain health and healing in Pholela today. Another body of literature in anthropology – scholarship on ontology – helps to unpack the value of this object for understanding health and healing on the periphery of global health. This literature pushes beyond understandings of sociocultural systems, 'taking seriously' (Heywood 2012) the explanations of informants and the ontological multiplicity they reveal.

In this essay, I use Gogo Hlela's Lucozade bottle to examine the ways that Pholela's residents, like many people in the global South, navigate ontological multiplicity in health and healing. A product of nutritional science and a vessel for *umuthi*, Gogo Hlela's Lucozade bottle – this everyday object, a tangible example of the mundane – exemplifies the unexpected overlaps and interconnections of worlds, overlaps that global health projects fail to see, and do not and cannot address. To understand this object, I first ground this story in Pholela. I then turn to the literature on global health and medical pluralism to better understand health and healing. Next, to understand the importance of the Lucozade bottle, I draw on over a decade of ethnographic research in Pholela and build on the insights of medical anthropology and theoretical works on ontology. Finally, I return to Gogo Hlela's Lucozade bottle to argue for an attention to mundane objects as a way to better understand

the ontological multiplicity global health projects face. In doing so, I argue for an 'objectcentered ethnography' (Henare, Holbraad, and Wastell 2007), which in this case reveals the limits of global health and challenges its commitment to singular, universal ontology.³

Pholela, South Africa

Pholela, now officially known as Dr. Nkosazana Dlamini-Zuma Local Municipality, sits in the foothills of the southern Drakensberg Mountains in KwaZulu-Natal, South Africa. As a rural area and former homeland, Pholela has long been a site of disinvestment and racialized state power. From long-standing programs to fight soil erosion to the recent roll-out of services like water taps and electricity, the legacies of colonialism, apartheid, and continued inequality are visible in area homesteads and the land between them. The extension of public health programs and health care has long been a central strategy of the state for ensuring a healthy workforce and exercising biopolitical control (Jochelson 2001; Kark 2003; Packard 1989b, a); the district hospital, community health center, and local and mobile clinics, all funded by the South African government, are reminders of the imbrication of the state and health in this place (Sisonke Health District, n.d.). In Pholela, however, residents also have access to a number of healers who operate outside of the official, government-sanctioned health care system. While many of them can heal illnesses and injuries that doctors heal, some specialize in illnesses beyond the purview of biomedicine, illnesses from ancestors and witchcraft. When residents like Gogo Hlela get sick, they seek care from whomever can best treat the illness they have. For Gogo Hlela, this includes nurses, doctor, and an abathandazi.4

Like many places in sub-Saharan Africa where clinical medicine is provided, the tendrils of global health are visible in Pholela, even though there are no stand-alone projects. In the eleven years I have been working in Pholela, various NGOs have come and gone with small

- A group of scholars have developed an object-centered kind of philosophy called 'object-oriented ontology'. Building on nature-society scholarship, this branch of philosophy challenges the division between humans and nonhumans and puts all objects on equal footing. It moves questions of ontology away from humans and their experiences, arguing that objects must be understood on their own terms. For these scholars, while relationships are important in this thinking, objects or things cannot be reduced to relationships (Bryant, Srnicek, and Harman 2011; Harman 2018; Morton 2011). In this piece I am doing something different, using objects as a way to think about the interconnections and overlaps among worlds of health and healing, worlds that are made up of social relationships that include what we might think of as the material and immaterial. In so doing, I extend the work of anthropologists like Annemarie Mol (2002) and science studies scholars like Bruno Latour (2012) into medical anthropology.
- 4 For more on the navigation of health and healing in this place, see: Janzen 1987, Feierman 1985, Feierman and Janzen 1992.

projects offering AIDS education, testing, support groups, and even internationally funded medications, which are provided to specialty clinics within larger hospitals and health centers.

Critical scholarship on global health

In the past two decades, as global health programs have increased around the world, so has the scholarship about them. Critical medical anthropologists have made particularly important contributions to this literature (Adams 2010, 2016; Adams, Burke, and Whitmarsh 2014; Biehl and Petryna 2013; Farmer et al. 2013; Fassin 2006; Lakoff 2010). Central to their critiques has been an acknowledgement of the power differences between the global North and global South - the doers and the recipients of global health (Farmer 2005, 2006) - and an attention to the role of science, research, and training in global health programs (Biruk 2012; Crane 2013; Wendland 2012). These scholars have critiqued the notion that bodies are standardizable and interchangeable, and have questioned the supposedly objective and universal science through which global health programs articulate their work (Brotherton and Nguyen 2013; Koch 2013; Lock and Nguyen 2010). Still other scholars show the limits and specificities of the science of global health projects in the places where they are implemented. Take the example of Amy Moran-Thomas's (2013) work on the guinea worm, in which she examines different understandings of causality, and how biomedical logics meet their limits in a place where illnesses in specific people are attributed to witchcraft and understood with the help of oracles.

Other scholars argue that the trouble with the scientific guise of global health is that it covers over the important, deep, and entrenched power relations that shape projects, and the people and places in which they are implemented (Nguyen 2010). Through this work, we learn that global health projects create enclaves of care where certain people have access to medical care and the global circulations of experts, knowledge, and technologies that go with it (Brada 2011; Geissler 2013; Whyte et al. 2013). We learn that this affects not only the targets of these interventions, but also other people who live in the sites of global health interventions (Biruk 2012; Kalofonos 2010; McKay 2018; Neely and Nading 2017). Through this we also learn that the people who live in the places of global health interventions play a role in their success and the knowledge they produce (Moran-Thomas 2013). As we will see, the story in Pholela is a bit different. As a site on the margins of global health, it does not fit perfectly with the current scholarship, even though its residents and their health and healing options are certainly shaped by global health. Telling a global health story from the margins, like from the body, homestead, and objects of Gogo Hlela, opens up new questions, critiques, and avenues for analysis (Neely and Nading 2017).

Medical anthropology and medical pluralism

The literature on medical pluralism and health and healing in Africa offers important insight into the multiple healing practices in which people in Pholela engage. Medical pluralism reveals that scientific medicine and public health – the propagation of which are central to global health projects – are only two of a number of treatment regimens and health-related logics that people like Gogo Hlela access. Scholars have further shown that, in many African settings, it is ill people and their families who navigate a plurality of healing regimes to improve and maintain health (Feierman 2000; Janzen 1992; Livingston 2005; Ngubane 1977). Other anthropologists have sought to deconstruct popular and medical portrayals of so-called traditional medicine as a relic of an unscientific past, pointing out that these healing regimes and their practitioners are active participants producing health in the present (see for example Janzen 2017; Pigg 2013; Rasmussen 2017). Some have debunked the dichotomy between 'local' or 'specific' traditional healing and supposedly 'global' or 'universal' scientific medicine (Rasmussen 2017).

Taken together, these scholars demonstrate that as biomedicine is practiced, it is shaped by the places in which it is implemented, rendering scientific medicine locally specific in ways similar to traditional healing (see for example Wendland 2010). Building on these insights, scholars have pointed out that biomedicine and popular or traditional medicine are not, in fact, separate (Flint 2008; Tilley 2011). For example, in an examination of patients in a hospital, Stacy Langwick (2008) reveals that they often use multiple healing regimens at once in order to treat multiple afflictions in the same body, and, moreover, that nurses help manage the multiple treatments patients draw on as the nurses gain and enact knowledge from different healing systems. In their implementation traditional and biomedicine are not separate (Langwick 2008). Gogo Hlela's multiple afflictions are reminiscent of this.

Questions of ontology in anthropology

To really comprehend the significance of Gogo Hlela's *umuthi*-filled Lucozade bottle for understanding health and healing on the periphery of global health, we need one more body of literature: scholarship about ontology. For the purposes of this essay, I break this work into two groups: scholarship related to the 'ontological turn' and scholarship by medical anthropologists interested in questions of ontology. Together, this body of work calls into question the notion that social and cultural life, knowledge, ideas, and human societies are all just different interpretations mapped onto a single reality. In other words, the scholarship of the ontological turn is premised on the idea that differences – among peoples and between researchers and research subjects – are ontological (Heywood 2012). In the case of Gogo Hlela, this approach pushes us to understand what kind of world must be possible for

witchcraft to make her sick, rather than presuming that witchcraft was just a local articulation of a 'real' biomedical illness. (There are echoes of medical pluralism here.)⁵

Recognizing Gogo Hlela's cough – the physical symptom of her illness – as a sign of *idliso*, and thus an illness that cannot be completely translated into a biomedical illness, requires us to 'take seriously' the explanation she offered about her illness and, by extension, the worlds of health and healing – the ontological multiplicity – she inhabits (Heywood 2012). This practice of 'taking seriously' is a hallmark of the scholarship of the ontological turn (Heywood 2012). This is not to say that anthropologists have not long taken seriously what they learn from their interlocuters, just that the ontological turn posits that this mode of analysis leads to a recognition that there are different ontologies. With this in mind, Morten Axel Pedersen (2012) argues that an ontological approach poses 'ethnographic questions anew, which already appear to have been answered by existing approaches'. And Paolo Heywood (2012, 144) writes that the ontological turn offers a call for 'an intellectual and political fidelity to our field(sites)'. In short, this is an ethnography-first approach. As Langwick (2011, 25) puts it, 'The ways that epistemologies (knowledges) are (or are not) intertwined with ontologies (matters) becomes an ethnographic question'.

In addition to this work, a handful of anthropologists have taken up the question of ontology and health. For example, in her study of arteriolosclerosis in a hospital in the Netherlands, Annemarie Mol (2002) examines the practices by which this disease comes into being to argue that they make 'the body multiple': they produce ontological multiplicity. Langwick (2017) takes this approach and insight to Africa, where she argues that through healing practices, African bodies are born of science, medicine, and still something else. In so doing, she calls for the recognition that a single body can be multiple: an 'analysis [of health and healing] needs to move from examining the coexistence of multiple bodies ('medical pluralism') to examining the production of the "body multiple" (Langwick 2008, 437). Further, for Langwick, understanding ontological multiplicity from Africa is particularly important both because of the multiple healing systems and practices that people engage in and because of the insight into ontological multiplicity that Africa offers. Particularly helpful for my object-centered ethnography, in their introduction to Thinking through Things, Amiria Henare, Martin Holbraad, and Sari Wastell (2007, 7) write that they see the study of objects as 'a methodology where the "things" themselves may dictate a plurality of ontologies [and] a multiplicity of theories'. Adding to this, Eduardo Viveiros de Castro (2004, 4) writes that objects 'constitute as social relation[s]'. Putting these insights together,

⁵ As a geographer, it's worth noting that within my home discipline there hasn't been so much of an ontological turn as a continued investment in questions of ontology.

scholars of the ontological turn demonstrate that objects are never just disembodied things – never part of a 'universal' nature – but instead offer scholars a way to understand multiple sociomaterial worlds or ontologies that overlap, connect, congeal, and break apart in objects and in informants' explanations.

This focus on objects opens up questions of health and healing on the margins of global health. For example, to understand ontological multiplicity, Langwick (2011, 7) writes about various objects of healing – plants that are part of cures, ledgers in which experiments are recorded, and more – and how they trouble the divide between 'science and nonscience'. The objects she writes about reveal the imbrication of these worlds. In the example I offer here, the *umuthi*-filled Lucozade bottle provides an important object through which to examine the connections between the not-entirely-separate worlds of health and healing that Gogo Hlela and her neighbors occupy.

Now that we have a sense of Pholela, an idea of an ontological method, and an understanding of critical work on global health and medical pluralism, let us return to Gogo Hlela's homestead, her case of *idliso*, and her Lucozade bottle.

Making sense of Gogo Hlela's Lucozade bottle

Holding the Lucozade bottle tight, Gogo Hlela raised it to her lips with shaky hands and swallowed, and soon her cough subsided. The *umuthi* in the bottle had settled her, counteracting the *idliso* that was making her cough. As many people have explained to me, *idliso* is a witchcraft illness sent from one person to another with the help of an expert called an *umthakathi*. To make a person sick, an *umthakathi* draws on the ancestors to prepare an *umuthi* made of plants and animal parts, which she places in the food of the intended victim. When the victim consumes it, she becomes sick with *idliso* leads to a productive cough, chest and rib pains, night sweats, fever, and fatigue. To get better, the victim and her family must find a healer who can cure her, someone who works with the ancestors to cure witchcraft illnesses. Such a healer can repair the relationships – among humans and nonhumans, among family and friends – and physical symptoms that make up *idliso*. The *umuthi*, a holy water, in Gogo Hlela's Lucozade bottle, which was prepared by an *umthandazi*, was to do just that.

An energy drink, Lucozade is an engineered food developed from the latest in nutritional science. It is purchased at a premium for the boost in energy it promises. While I've never seen Lucozade included in the food supplement parcels that accompany the pharmaceuticals of global health projects, it might as well be there. Inconsistently provisioned, packets of nutritionally fortified peanut butter or porridge are welcome accompaniments to the drugs

and the clinical care that form the backbone of global health programs (Kalofonos 2010; McKay 2018). These scientifically engineered foods are designed to pack a powerful nutrient punch, giving an ill person's immune system a boost in order to maximize the effects of the drugs she takes to fight her illness. Lucozade is designed to do something similar.⁶

Anthropologists have shown that these food parcels are more than just packs of nutrients. For example, in her examination of food supplements in Mozambique, Ramah McKay (2018) writes about how they fortify both bodies and social networks. As people collect their food parcels, they share them, sell them, and use them to help out or pay back members of their extended kinship networks. For the purveyors of global health programs, however, these food parcels are strictly about biological health, tied to body mass and designated for people who need calories and nutrients in order to maximize treatment. In this view, food is medicine bound to improve the health of the biological body through its nutrients. But as McKay (2008, 128) writes, 'Lived experiences of food support challenged distinctions between food as medicine and food as an economic, material, and relational resource' (see also Kalofonos 2010; Trapp 2016). For scholars like McKay, food - as an object - is always both social and biological; it is the product of human and nonhuman relationships. In Pholela, food and medicine are also social and material, procured and shared through social networks and livelihood practices that have always been shaped by the broader politicaleconomies that determine work and wages, and enable the production of engineered foods like Lucozade.

Gogo Hlela's Lucozade bottle and the *umuthi* it holds is an object that allows us to see many of the social relations that shape health and healing in Pholela. Nutritional science and its global reach, the international marketplace for sports and energy drinks, wage-based livelihood strategies, the industrial apparatus needed to make engineered foods like Lucozade, and synthetic nutrients – aspects of life in the twenty-first century that are part and parcel of global health – shape health, healing, and life in Pholela. These broader structures come to inhabit the homes and bodies of Pholela's resident through foods like Lucozade, available on the shelves of grocery stores and the more informal *spaza* shops that mark Pholela's communities. Likewise, the power of the ancestors, the knowledge of healers, unsettled social relationships, plant and animal parts, and holy water all come to inhabit homes and bodies thanks to *umuthis* designed to treat illnesses. And these relationships come together in Gogo Hlela's Lucozade bottle and in her body. But health and illness are about

6 Like Powerade and Gatorade in the United States, Lucozade treads the line between sports/energy drinks and junk food. That said, in places like Pholela, where finances are very tight and junk food is more affordable, Lucozade is a luxury used only for its energy promise and its fortifying electrolytes.

more than social relationships. Gogo Hlela's cough and sore chest, her swollen legs, and the imperfection in her heart are all integral to her health and illness. It is the relationships among these components – the heart imperfection, doctors, and pills; and the cough, *umthandazi*, and *umuthi* – that comprise the different ontologies her health and healing practices enact. This Lucozade bottle and the *umuthi* inside it reveal that the different worlds of health and healing that Gogo Hlela occupies are not as separate as they first appear. As Henare and colleagues (2007, 14) put it, "different worlds" reside in things'.

But, whereas different worlds might reside in things, in the case of Gogo Hlela's Lucozade bottle, those worlds are not entirely separate. Marilyn Strathern (2005) offers the concept of 'partial connections' to argue that worlds connect (partially) and shape each other; they are not separate and whole. For Strathern, anthropology is an intellectual journey to recognize the connections among different cultural and social configurations (see also de la Cadena 2010). With this concept of partial connections, Strathern (2005) both opens up the possibility for ontological multiplicity and the interconnectedness of worlds. Taking this lesson to Gogo Hlela's Lucozade bottle, we see that it is a sports drink that held an *umuthi*. It is an object in which the world of science and global capital, and the world of angry neighbors and powerful ancestors reside together and influence each other. This was the same for Gogo Hlela's body. She was taking pills first developed in the global North for hypertension and diabetes that she collected at the hospital and the mobile clinic, both of which offer biomedical care. At the same time, she was drinking her *umuthi* from the *umthandazi*. In this bottle and in her body, these two treatments and her understandings of those treatments came together as she became healthier.

As they are taken up and used in ways never intended, the objects of global health – pills, food parcels, and people's bodies - reveal the connections between and permeability of worlds, rendering them multiple and contested. Or perhaps better put, they reveals that residents occupy worlds that are, in the words of Strathern (2005, 35), 'more than one and less than many'. In this way, ontological multiplicity is a recognition that there is no single, universal ontology. An ethnographic approach, and an object-centered approach in particular, inspired by long-standing currents in anthropology and most recently taken up by the ontological turn is fundamental to understanding ontological multiplicity. In my years visiting, talking with, and learning from the Hlelas, I have gleaned much about the worlds that they occupy and embody, worlds in which global funders, national policies, poverty, ancestors, angry neighbors, family members, healers, physical symptoms, words, expertise, pharmaceuticals, plants, animals, and the relationships among them and others all shape how they become ill and how they become better. Long-term relationships with people in this place, and a commitment to explaining objects and practices through the concepts - and worlds - of these interlocuters have been the key to unlocking this multiplicity and to recognizing the mundane objects that are produced through them. But ethnography is not

the method of global health, where pharmaceutical research, clinical care, and epidemiology (a quantitative social science) come together to research and address specific health problems that are supposed to be universally understood by those versed in the sciences. In the work of global health, there is just one ontology, which is neatly bounded, known only through scientific research, and addressed through the application of the biomedical and population health sciences.

Gogo Hlela's umuthi-filled Lucozade bottle challenges this singularity. Moreover, objects like the Lucozade bottle show that that people aren't just 'moving back and forth between healing settings' (Langwick 2007, 96), but that they are inhabiting them, accessing them simultaneously, and managing them to achieve health. And they show further that those settings are not separate. The subjects of global health interventions live in the ontological multiplicity Mol teaches us about. As a result, the objects they use reveal this multiplicity too. As Mol (2002, 5) writes, 'Far from necessarily falling into fragments, multiple objects tend to hang together somehow'. Once we begin to understand this, especially in the era and places of global health, we begin to rethink critical and political analyses of global health. Rather than simply a question of the limits of universal science, uneven development, racialized and gendered power, and the structural violence that results from the global political-economic order, we begin to see politics in terms of relations among worlds, or in their partial connections, in the words of Strathern. As Langwick (2011, 244) makes clear, a focus on ontology is important because 'ontologies are not removed from sign, from symbol, from prayer, from friendship, from love, or from action. They are political; they are about power. They are about the obligations and responsibilities that come with the emergence of things [or objects] that matter'. The value of this view and an object-centered approach is that it opens up new questions, new understandings (of power, politics, and everything else), and new possibilities for healthier futures, rooted in the enlarged and entangled worlds of people who live in the global South in the age of global health (de la Cadena 2010, drawing on Rancière 1999).

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Abigail Neely is an assistant professor of geography at Dartmouth College. Her book manuscript, *Reimagining Social Medicine from the South*, rethinks the concept of social life through the examination of a famous experiment in social medicine from the lives, homes, bodies, and practices of rural Africans in South Africa. In addition, she has published articles in *Social Science and Medicine*, *Progress in Human Geography*, *The Annals of the American Association of Geographers*, *Health and Place*, and the *Journal of Southern African Studies*.

References

- Adams, Vincanne. 2010. 'Against Global Health: Arbitrating Science, Non-science, and Nonsense through Health'. In *Against Health: How Health Became a New Morality*, edited by Jonathan Metzl and Anna Kirkalnd, 40–60. New York: NYU Press.
- Adams, Vincanne. 2016. Metrics: What Counts in Global Health. Durham, NC: Duke University Press.
- Adams, Vincanne, Nancy J. Burke, and Ian Whitmarsh. 2014. 'Slow Research: Thoughts for a Movement in Global Health'. *Medical Anthropology* 33 (3): 179–97. https://doi.org/10.1080/01459740.2013.858335.
- Biehl, João, and Adriana Petryna. 2013. When People Come First: Critical Studies in Global Health. Princeton, NJ: Princeton University Press.
- Biruk, Crystal. 2012. 'Seeing Like a Research Project: Producing "High-Quality Data" in AIDS Research in Malawi'. *Medical Anthropology* 31 (4): 347–66. https://doi.org/10.1080/01459740.2011.631960.
- Brada, Betsey. 2011. "Not Here": Making the Spaces and Subjects of "Global Health" in Botswana'. *Culture, Medicine, and Psychiatry* 35 (2): 285–312. https://doi.org/10.1007/s11013-011-9209-z.
- Brotherton, P. Sean, and Vinh-Kim Nguyen. 2013. 'Revisiting Local Biology in the Era of Global Health'. *Medical Anthropology* 32 (4): 287–90. https://doi.org/10.1080/01459740.2013.791290.
- Bryant, Levi, Nick Srnicek, and Graham Harman. 2011. The Speculative Turn: Continental Materialism and Realism. Melbourne, Australia: re. press.
- Crane, Johanna Tayloe. 2013. Scrambling for Africa: AIDS, Expertise, and the Rise of American Global Health Science. Ithaca, NY: Cornell University Press.
- de la Cadena, Marisol. 2010. 'Indigenous Cosmopolitics in the Andes: Conceptual Reflections beyond "Politics". *Cultural Anthropology* 25 (2): 334–70. https://doi.org/10.1111/j.1548-1360.2010.01061.x.
- Farmer, Paul. 2005. Pathologies of Power: Health, Human Rights, and the New War on the Poor. Berkeley: University of California Press.
- Farmer, Paul. 2006. AIDS and Accusation: Haiti and the Geography of Blame. Berkeley: University of California Press.
- Farmer, Paul, Arthur Kleinman, Jim Kim, and Matthew Basilico. 2013. Reimagining Global Health: An Introduction. Berkeley: University of California Press.
- Fassin, Didier. 2006. 'That Obscure Object of Global Health'. In Medical Anthropology at the Intersections: Histories, Activisms, Futures, edited by Marcia S. Inhorn and Emily A. Wentzell, 95–115. Durham, NC: Duke University Press.
- Feierman, Steven. 1985. 'Struggles for Control: The Social Roots of Health and Healing in Modern Africa'. *African Studies* Review 28 (2-3): 73–147.

- Feierman, Steven. 2000. 'Explaining Uncertainty in the Medical World of Ghaambo'. Bulletin of the History of Medicine 74: 317–44.
- Feierman, Steven, and John M. Janzen. 1992. *The Social Basis of Health and Healing in Africa*. Berkeley: University of California Press.
- Flint, Karen Elizabeth. 2008. Healing Traditions: African Medicine, Cultural Exchange, and Competition in South Africa, 1820–1948. Athens: Ohio University Press.
- Geissler, P. Wenzel. 2013. 'Public Secrets in Public Health: Knowing Not to Know while Making Scientific Knowledge'. *American Ethnologist* 40 (1): 13–34. https://doi.org/10.1111/amet.12002.
- Harman, Graham. 2018. Object-Oriented Ontology: A New Theory of Everything. London: Pelican Books.
- Henare, Amiria J. M., Martin Holbraad, and Sari Wastell. 2007. Thinking through Things: Theorising Artefacts Ethnographically. New York: Routledge.
- Heywood, Paolo. 2012. 'Anthropology and What There Is'. *Cambridge Journal of Anthropology* 30 (1): 143–51. https://doi.org/10.3167/ca.2012.300112.
- Janzen, John M. 1987. 'Therapy Management: Concept, Reality, Process'. Medical Anthropology Quarterly 1 (1): 68–84.
- Janzen, John M. 2017. 'Science in the Moral Space of Health and Healing Paradigms in Western Equatorial Africa'. In *African Medical Pluralism*, edited by William C. Olsen and Carolyn Sargent, 90–109. Bloomington: Indiana University Press.
- Janzen, John M. 1992. Ngoma: Discourses of Healing in Central and Southern Africa. Berkeley: University of California Press.
- Jochelson, Karen. 2001. The Colour of Disease: Syphilis and Racism in South Africa, 1880–1950. New York: Palgrave.
- Kalofonos, Ippolytos Andreas. 2010. "All I Eat Is ARVs": The Paradox of AIDS Treatment Interventions in Central Mozambique'. *Medical Anthropology Quarterly* 24 (3): 363–80. https://doi.org/10.1111/j.1548-1387.2010.01109.x.
- Kark, Sidney L. 2003. 'The Social Pathology of Syphilis in Africans'. International Journal of Epidemiology 32 (2): 181–86. https://doi.org/10.1093/ije/dyg025.
- Koch, Erin. 2013. 'Tuberculosis Is a Threshold: The Making of a Social Disease in Post-Soviet Georgia'. *Medical Anthropology* 32 (4): 309–324. https://doi.org/10.1080/01459740.2012.751384.
- Lakoff, Andrew. 2010. "Two Regimes of Global Health'. Humanity: An International Journal of Human Rights, Humanitarianism, and Development 1 (1): 59–79.
- Langwick, Stacey A. 2007. 'Devils, Parasites, and Fierce Needles: Healing and the Politics of Translation in Southern Tanzania'. *Science, Technology, & Human Values* 32 (1) :88–117. https://doi.org/10.1177/0162243906293887.

- Langwick, Stacey A. 2008. 'Articulate(d) Bodies: Traditional Medicine in a Tanzanian Hospital'. *American Ethnologist* 35 (3): 428–39. https://doi.org/10.1111/j.1548-1425.2008.00044.x.
- Langwick, Stacey A. 2017. 'The Value of Secrets'. In *African Medical Pluralism*, edited by William C. Olsen and Carolyn Sargent, 31–49. Bloomington: Indiana University Press.
- Langwick, Stacey Ann. 2011. Bodies, Politics, and African Healing: The Matter of Maladies in Tanzania. Bloomington: Indiana University Press.
- Latour, Bruno. 2012. We Have Never Been Modern. Cambridge, MA: Harvard University Press.
- Livingston, Julie. 2005. Debility and the Moral Imagination in Botswana. Bloomington: Indiana University Press.
- Lock, Margaret, and Vinh-Kim Nguyen. 2010. An Anthropology of Biomedicine. Malden, MA: Wiley-Blackwell.
- Lucozade. n.d. 'Lucozade' (homepage). Accessed 5 February 2018. https://www.lucozade.com/.
- McKay, Ramah. 2018. Medicine in the Meantime: The Work of Care in Mozambique, Critical Global Health. Durham, NC: Duke University Press.
- Mol, Annemarie. 2002. The Body Multiple: Ontology in Medical Practice, Science and Cultural Theory. Durham, NC: Duke University Press.
- Moran-Thomas, Amy. 2013. 'A Salvage Ethnography of the Guinea Worm: Witchcraft, Oracles and Magic in a Disease Eradication Program'. In When People Come First: Critical Studies in Global Health, edited by João Biehl and Adriana Petryna, 207–242. Princeton, NJ: Princeton University Press.
- Morton, Timothy. 2011. 'Here Comes Everything: The Promise of Object-Oriented Ontology'. *Qui Parle: Critical Humanities and Social Sciences* 19 (2): 163–90. https://doi/10.5250/quiparle.19.2.0163.
- Neely, Abigail H., and Alex M. Nading. 2017. 'Global Health from the Outside: The Promise of Place-Based Research'. *Health & Place* 45: 55–63. https://doi/10.1016/j.healthplace.2017.03.001.
- Neely, Abigail H., and Arunsrinivasan Ponshunmugam. 2019. 'A Qualitative Approach to Examining Health Care Access in Rural South Africa'. *Social Science & Medicine* 230: 214–21. https://doi.org/10.1016/j.socscimed.2019.04.025.
- Ngubane, Harriet. 1977. Body and Mind in Zulu Medicine: An Ethnography of Health and Disease in Nyuswa-Zulu Thought and Practice. Studies in Anthropology. New York: Academic Press.
- Nguyen, Vinh-Kim. 2010. The Republic of Therapy: Triage and Sovereignty in West Africa's Time of AIDS. Durham, NC: Duke University Press.
- Packard, Randall M. 1989a. 'The "Healthy Reserve" and the "Dressed Native": Discourses on Black Health and the Language of Legitimation in South Africa'. *American Ethnologist* 16 (4): 686–703. https://doi.org/10.1525/ae.1989.16.4.02a00050.

- Packard, Randall M. 1989b. White Plague, Black Labor: Tuberculosis and the Political Economy of Health and Disease in South Africa. Comparative Studies of Health Systems and Medical Care. Berkeley: University of California Press.
- Pedersen, Morten Axel. 2012. 'Common Nonsense: A Review of Certain Recent Reviews of the "Ontological Turn". *Anthropology of this Century* 5 (October). http://aotcpress.com/articles/common_nonsense.
- Pigg, Stacy Leigh. 2013. 'On Sitting and Doing: Ethnography as Action in Global Health'. Social Science & Medicine 99: 127–34.

https://doi.org/10.1016/j.socscimed.2013.07.018.

- Rancière, Jacques. 1999. Disagreement: Politics and Philosophy. Minneapolis: University of Minnesota Press.
- Rasmussen, Susan J. 2017. 'Spirits and Pills Who Are against Children'. In *African Medical Pluralism*, edited by William C. Olsen and Carolyn Sargent, 69–89. Bloomington: Indiana University Press.
- Sisonke Health District. Sisonke information brochure. Edited by KwaZulu-Natal Health.
- Strathern, Marilyn. 2005. Partial Connections. New York: Rowman and Littlefield Publishers, Inc.
- Tilley, Helen. 2011. Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870–1950. Chicago: University of Chicago Press.
- Trapp, Micah M. 2016. 'YOU-WILL-KILL-ME BEANS: Taste and the Politics of Necessity in Humanitarian Aid'. *Cultural Anthropology* 31 (3): 412–37. https://doi.org/10.14506/ca31.3.08.
- Viveiros de Castro, Eduardo. 2004. 'Perspectival Anthropology and the Method of Controlled Equivocation'. *Tipití: Journal of the Society for the Anthropology of Lowland South America* 2 (1): 3–22.
- Wendland, Claire L. 2010. A Heart for the Work: Journeys through an African Medical School. Chicago: University of Chicago Press.
- Wendland, Claire L. 2012. 'Moral Maps and Medical Imaginaries: Clinical Tourism at Malawi's College of Medicine'. American Anthropologist 114 (1): 108–122. https://doi.org/10.1111/j.1548-1433.2011.01400.x.
- Whyte, Susan Reynolds, Michael Whyte, Lotte Meinert, and Jenipher Twebaze. 2013. 'Therapeutic Clientship: Belonging in Uganda's Projectified Landscape of AIDS Care'. In When People Come First: Critical Studies in Global Health, edited by João Biehl and Adriana Petryna, 140–65. Princeton, NJ: Princeton University Press.