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Translating Where There Is No Doctor: How the production of local knowledges propels global travels

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Translating *Where There Is No Doctor*:

How the production of local knowledges propels global travels

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DISSERTATION

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"All that you touch, you change. All that you change, changes you." – Octavia Butler

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Abstract

This dissertation focuses on how health knowledges are produced and travel through an analysis of the translation and adaptation of *Where There Is No Doctor*, one of the most widely used health manuals in the world. First published in the 1970s, it spread around the globe with health social movements, and has been translated into over 80 languages. Using qualitative methods and grounded theory analysis, this research explores translations and adaptations in Hindi, Tamil, Kannada, and English for use in India. The analysis sits at the intersection of sociology of health and illness, critical global health, and postcolonial science and technology studies. I make three key arguments: (1) the book serves both an instrumental role as a tool for people training community health workers, and a symbolic, political role, for health professionals focused on advocacy; (2) the book's invitation to adapt content and illustrations to meet local needs, and to integrate lay and expert knowledges across a variety of medical systems, allows it to travel as a successfully global object; and (3) health knowledges produced in these editions are fundamentally new knowledges.

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Chapter 1 – Introduction: traveling texts

Where There Is No Doctor is one of the most widely used health care manuals in the world. Originally published in 1973 as *Donde No Hay Doctor*, it was translated into English, and from there into 85 other languages. This is a similar number of languages as the Bhagavad Gita, one of Hinduism's sacred texts, and a little more than the Harry Potter series (ISKCON 2015; Rowling 2017). Heavily illustrated, with concrete suggestions for how to prevent, diagnose, and treat a wide of range of health conditions, *Where There Is No Doctor* was written for a rural, isolated context in which there was literally no access to a formal, biomedical system of health care. It traveled with the community health worker movement, from Latin America, through the US, to South Asia, Africa, and beyond. It has since been taken up in a variety of settings where health care is theoretically available, but only across a stratified system that denies access to those without the financial resources to pay for transport, care, medication, and often, clean food and water. The travels over the last forty years of *Where There Is No Doctor* and the books it inspired provide an important case study for how global health knowledge is created, and how it travels. While Hesperian, the non-profit established to publish these texts, has conducted a handful of internal studies focused on distribution and use, and are working on larger-scale evaluation models (Walkover 2016), the books and their travels have not been systematically studied from a social science perspective. This dissertation takes up that project, and contributes to conversations on the production, valuation, and movement of health knowledges around the world.

Specifically, my dissertation focuses on how health knowledges are produced and travel through an analysis of the translation and adaptation of *Where There Is No Doctor* in Hindi, Tamil, Kannada, and English for use in India. I make three key arguments. First, the book serves

both an instrumental role as a tool for people training community health workers, and a symbolic, political role for health professionals focused on advocacy. Second, the book's invitation to adapt content and illustrations to meet local needs, and to integrate lay and expert knowledges across a variety of medical systems, allows it to travel as a successfully global object. Third, health knowledges produced in these editions are fundamentally new knowledges. This analysis sits at the intersection of sociology of health and illness, critical global health, and postcolonial science and technology studies.

This introductory chapter provides background on *Where There Is No Doctor* and related books, and the people who have produced, adapted, and translated them, followed by a literature review of the theoretical work that informed the framing and analysis of this dissertation. It closes with a review of the methods used to conduct the research, and an overview of the three empirical chapters. Chapter 2, taking a macro-level analysis, investigates theoretical frames for this work and argues that the book acts as a boundary object as people work between technical and political solutions to enduring health inequalities. Chapter 3, taking a meso-level analysis, analyzes the ways that the book changes (and stays the same), arguing that it is the localization of the book that makes it a successfully global object. Chapter 4, using a micro-level analysis of Tamil language editions, focuses in on the new knowledges produced in the process of translating.

Background

Where There Is No Doctor: a traveling text

Donde No Hay Doctor was published in 1973, based on the combined efforts of American volunteers and community health workers from rural Mexico. It was translated to English as *Where There Is No Doctor* in 1977, and Hesperian Health Guides was established as a non-profit publisher in Northern California to support the publication and global distribution of the book. Using an open-copyright model, translation and adaptation of the book were encouraged from the first printing, and both images and ideas from the text traveled quickly around the world, from Zimbabwe to Antarctica (Hesperian 2013). In the forty years since the publication of the first edition of *Where There Is No Doctor*, Hesperian has published eleven additional community health books, many of which have been translated and adapted for use by different groups across India. *Where There Is No Doctor* was first adapted for use in India in 1980 by a national non-profit based in Delhi, which distributed the book throughout the country. With re-drawn illustrations to show men and women in Indian clothing, and adapted lists of herbs and medications used across the country, the English for India volume was quickly taken up by groups training community health workers across the country. It was translated in turn into eight major Indian languages over the following decades, and the English for India version was re-printed and updated a number of times.

The text is written for low-literacy audiences, with the hope that an illiterate person with limited access to resources could find the information useful if it were being read aloud to them by a community health worker or neighbor with at least a few years of formal education. The back cover of the Hesperian edition of *Where There Is No Doctor* (Werner, Thuman, and

Maxwell 2009) states that the book is for villagers, village storekeepers and pharmacists, teachers, village health workers, and mothers and midwives. For the villager, it states that the book "explains in simple words and drawings what he can do it prevent, recognize, and treat many common sicknesses." For the village health worker, it emphasizes that the text "discusses ways to determine needs, share knowledge, and involve the community in activities that can better people's health." The English for India edition (Werner and Sathyamala 2014) has the same words on its back cover, with an addendum that "this latest, revised Indian edition retains the essence of the book as a health care handbook with added information in view of changing scientific and medical knowledge… Community action continues to be emphasized throughout the book along with traditional forms of healing." These ideas travel with the book, across continents, languages, and time: a focus on sharing knowledge, and on taking action on both an individual health and community level.

The pedagogy of *Where There Is No Doctor* is inspired by Paulo Freire's (1970) *Pedagogy of the Oppressed*. This method draws on Freire's experience teaching adult literacy to poor communities in Brazil: he quickly realized that drawing and building on the knowledge, experiences, and interests of his students would help them to learn, and him to teach, more effectively. His work spread around the world with adult literacy and educational reform focused on the knowledge and ability of marginalized populations: *Where There Is No Doctor* contributed to and was in part successful because of these travels. *Donde No Hay Doctor* was written in rural Ajoya, Mexico, translated to American English at the Hesperian offices in Northern California, then to Indian English in Delhi, and on to other languages from there. These travels serve as an example of learning across the global south. They are an important reminder that in many cases the knowledges that travel most readily in postcolonial contexts often come

from other postcolonial settings, rather than from the former colonizers. They are also one of many such paths the book took around the world.

This travel is limited in formal infrastructure – the American English and Mexican Spanish editions are distributed by a centralized organization, as are various translations. Hesperian was established as a non-profit publisher to distribute *Where There Is No Doctor* using an open copyright and regularly updates and reprints their flagship publication while continuing to develop and distribute related health books. While Hesperian produces new materials in English and Spanish, and has physical copies of most translations, it acts as only one of many nodes in a network the books form around the world. Its position in this network is central in some ways: the organization collects digital copies and contact information for translations on their website. It is more peripheral in others: regional translations like the English for Africa (Werner et al. 1993) and English for India (Werner and Sathyamala 2014) adaptations are controlled and distributed by other entities. However, travel between languages comes, for the most part, from the book being passed along from person to person, non-profit to non-profit. Translations in different regions are then primarily based on the most relevant adaptation or translation already in print. Even then, when regional publishers try to control the distribution of the book across India, their control is limited: they seed further translations, but other versions, sponsored by publishers, non-profits, and individuals appear on their own and flourish. Similarly, *Where There Is No Doctor* often stops short of being distributed through governmental and multilateral institutions: there are versions that have been printed by the Indian government, but never distributed, and images and some limited content appear in the government-issued handbooks for community health workers.[1] Writers, editors, translators, and readers send

[1] See Chapter 2 for further description of these programs and analysis of the dynamics.

feedback to Hesperian on how they think Hesperian editions should be changed, and Hesperian editors collate the feedback for the next time that text is changed. Framing the books as nodes helps to visualize this movement of knowledges around the world: a bumpy, contested, feedback-ridden, constantly shifting process that gets periodically codified in printed books. Until, of course, that book is picked up and adapted, translated, excerpted, and changed.

Hesperian Health Guides

Hesperian as it exists today originated with a group of volunteers led by David Werner,[2] a high school teacher from northern California who started working with village health workers after visiting the rural mountain town of Ajoya in the state of Sinaloa, Mexico. Over time the group built up a small nonprofit organization that integrated the work of local community health workers and American volunteers to support people living with disabilities and to create short written materials on general health, training health workers, and supporting disabled village children. As these materials were being combined to form the book that would later be published as *Donde No Hay Doctor* in 1973 and translated into English as *Where There Is No Doctor* in 1977, the group needed nonprofit status in the United States to manage its finances. It took over

[2] David Werner is the author of *Where There Is No Doctor*, and both important to this project because of that role, and purposely not centered in the analysis or narrative. In 1993, Werner was accused of sexually abusing teenage boys, and admitted to conducting what he considered supportive relationships over many years (Claiborne 1994). He left his position as executive director at Hesperian, and started a new non-profit called HealthWrights, based in Palo Alto (HealthWrights 2018). This raised additional concerns, as it continued his work with children (Mercury News Staff Writer 1994). Since Werner's departure, Hesperian has worked to include new content on fighting child sexual abuse: in 1999, the new executive director published a statement on this history and the organization's efforts (Shannon 1999). Werner was not prosecuted. I reached out to Werner through HealthWrights to be interviewed for this project at the suggestion of other participants, but did not receive a response. I chose to decenter him in narratives and analysis for a number of reasons. First, the work of writing, translating, editing, and updating *Where There Is No Doctor* and the books that followed was collaborative, and of the twelve books included in this study, his name is on only three. Second, his contributions are less important in the context of India. Third, his abuse of children, while in some ways an unsurprising abuse of power, is both inexcusable and not the story I set out to write for this project. I hope that others continue to uncover and analyze histories of abuse, sexual and otherwise, and to build a world in which such actions are a thing of the past.

the charter of the Hesperian Foundation, which had been established to support the Biafra refugee crisis, and whose work was ending as the civil war in Biafra died down. In the forty years since the publication of the first edition of *Where There Is No Doctor*, Hesperian has published eleven additional books, and it has developed a participatory development process that institutionalizes the value of lay and community-based knowledges for health.

Key to this materials development process is field testing, valued equally with formal medical review, based on the assumption that it is as important that the books be usable and useful to the intended audience as that they be technically accurate. Field testing directly elicits feedback from community members who will, ideally, use these books once they are published and translated. Once that feedback is collated, a team of editors plans what is usually a significant revision of the material. In this process field testing constitutes an invitation to co-create Hesperian materials. This invitation becomes even more significant after the initial publication of the books: because the books are produced using an open copyright, partner organizations are invited to translate and adapt materials, and NGOs that conducted field testing are often the first to take up this next stage of the work. Through these networks Hesperian books travel, taking on different forms, but usually recognizable by their line drawings (often redrawn for different contexts so that people can imagine themselves in the books), simple language, and titles. Translations also occur outside Hesperian's network, like the case of a Dari edition of *Where Women Have No Doctor* for Afghanistan, which Hesperian was not aware of until ten years after its publication, when the translators wrote to Hesperian to find out more about the organization. For Hesperian this global uptake is the measure of success. If the books are useful to individuals and communities around the world, if they allow people to take action for their own health, then they have made an impact.

Where There Is No _____

At the time of writing, Hesperian Health Guides published twelve original books, all of which informed this study.[3] They are listed here in order of publication (see Figure 1 below), with the dates they were published in English by Hesperian, followed by the date of the most recent printing:

- *Where There Is No Doctor* (1977, 2017)
- *Helping Health Workers Learn* (1982, 2012)
- *Where There Is No Dentist* (1983, 2015)
- *Disabled Village Children* (1987, 2018)
- *Where Women Have No Doctor* (1997, 2014)
- *Helping Children Who are Blind* (2000)
- *Helping Children Who Are Deaf* (2004, 2015)
- *A Book for Midwives* (2004, 2013)
- *A Health Handbook for Women with Disabilities* (2007)
- *A Community Guide to Environmental Health* (2008, 2012).

While data collection was underway, *Health Actions for Women* (2015) and *Workers' Guide to Health and Safety* (2015) were published. Hesperian currently publishes or is in the process of publishing Spanish-language editions of each of these books. Combined, the books have been translated into over 80 languages and used in 221 countries and territories (Hesperian 2013). Hesperian also sells and publishes a number of related texts that reflect the values of the organization and interests of people supporting community health programs.

[3] Many of these materials are available on Hesperian's website, in PDF form, and in a HealthWiki website format.

Figure 1: Books written and published by Hesperian, in order of publication

A background note for health education research in India

It is hard to overstate both the size of India and the diversity within it. India is home to 1.3 billion people, and is considered a lower-middle income country by the World Bank (UNdata 2016; WHO 2015b). Twenty-two languages are officially recognized in the constitution, and hundreds of additional languages are spoken throughout the country (Census of India 2011; Government of India 2016). See Figure 2 below for a visual representation of the diversity of languages. India is a medically pluralistic country, with a wide variety of medical systems actively practiced, originating from South Indian Dravidian texts, North Indian Sanskrit texts, the Middle East, and Europe (Sujatha and Abraham 2012).[4] While there have been significant health gains in some areas – for example, decreases in child and maternal mortality – overall life expectancy at birth was just 66 years in 2012 (WHO 2015b). Access to health care is inequitable, and distributed along economic lines: for example, in 2005 12% of women in the poorest quintile received at least four antenatal care visits, compared to 77% of women in the wealthiest quintile (WHO 2015a). There are many structures of social hierarchy in India: the one most commonly discussed is the caste system.[5] Outside of the caste system are a variety of indigenous tribal groups (Xaxa 1999). It is notable that discussions of caste rarely came up in my interviews, and so this dissertation includes very limited discussion of caste. The analysis does include some limited discussion related to tribal groups, which are often rural and under-served by government

[4] See Chapter 4 for additional background and analysis of this medically pluralistic landscape.
[5] Within the caste system, there are four main caste groups based on traditional occupations: Brahmins (priests), Kshatriyas (warriors), Vaishyas (traders and merchants), Shudras (artisans, farmers, and laborers). The fifth group, *Dalits* or untouchables, have historically not been allowed to interact with the upper castes, and have performed tasks such as manual scavenging (Ambedkar 1916). There are a variety of government categories designed to protect and provide services for disadvantaged groups: because of the history of British rule, these groups are now commonly referred to by their administrative categories as 'scheduled castes' (SC) and 'scheduled tribes' (ST). Other disadvantaged groups are categorized under 'other backward classes' (OBC) (Walkover et al. Forthcoming).

systems. *Where There Is No Doctor* was originally written in Mexico, and while the original does not mention caste, it does include more general content on social hierarchy and health.

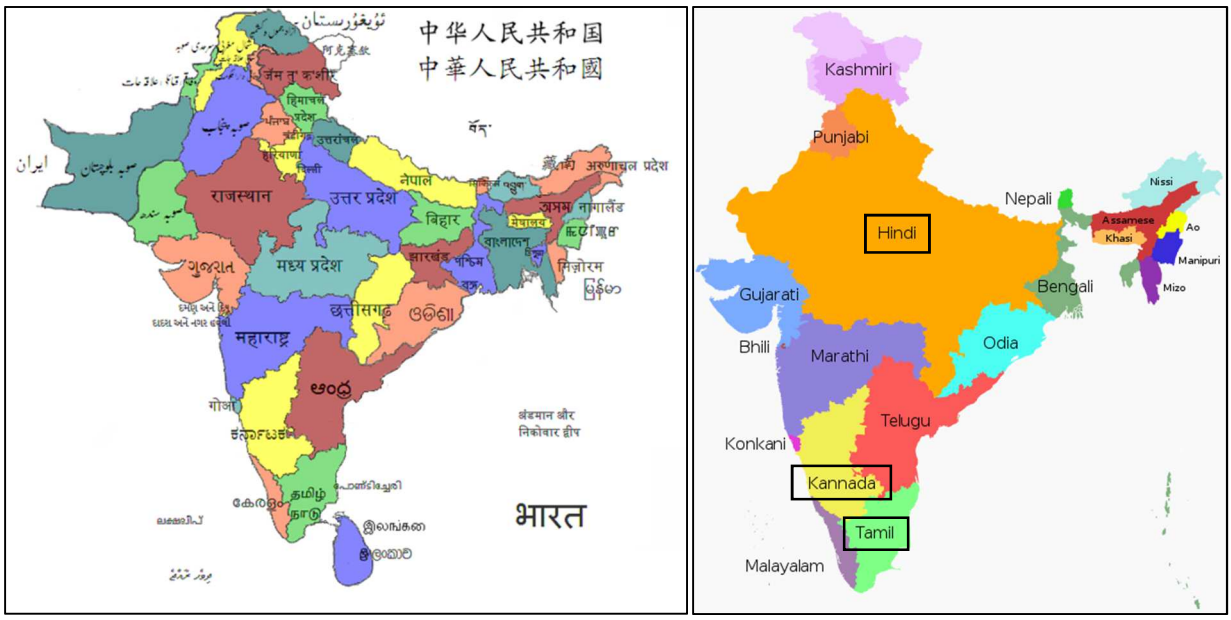


Figure 2:[6] Map of South Asia with Indian state names and names of surrounding countries written in the relevant dominant language; Map of India by most commonly spoken first language (languages included in this study are marked with a box, and English is spoken across the country)

Where There Is No Doctor in India

This project focuses on the English for India and Hindi editions (see Figure 3), as well as Kannada and Tamil translations. *Where There Is No Doctor* was first adapted for use in India in 1980 by the Voluntary Health Association of India (VHAI), a national non-profit based in Delhi, which distributed the book throughout the country. VHAI was established in 1970 by a Catholic priest from the US who dedicated his life to building up both Catholic and secular community

[6] Image sources: States of South Asia (Apengu 2010); Language Region maps of India (Filpro 2016)

health institutions across India, and mentored generations of Indian public health professionals (VHAI 2016). With re-drawn illustrations to show men and women in Indian clothing, and examples of herbs and generic and brand names of drugs, VHAI's English-language volume was quickly taken up by groups training community health workers across the country. It was translated in turn into eight major Indian languages by both VHAI-affiliated and other organizations, and the English-for-India version is updated regularly and remains in print.[7] In addition to these adaptations and translations, *Where There Is No Doctor* inspired both explicit political analyses of health (Jan Swasthya Abhiyan 2004; Sathyamala, Bhanot, and Sundharam 1986) as well as community health guides created within and for an Indian context, including a set of eight training manuals for the government community health worker program (Ashtekar 2002; NHM 2016a).

Kannada translations were done by a husband and wife who have published the books through a variety of means, most recently through a non-profit called Jagruti that they co-founded (see Figure 4). There have been three Tamil translations (see Figure 5), each published by a different group and adapted from both the previous Tamil translation as well as the contemporary American and Indian English editions. The first was published by a small press called Cre-A, the second was published by the state affiliate of VHAI, the Tamil Nadu Voluntary Health Association (TNVHA), and the third was published by a small press called Adaiyaalam. Other Indian language editions not covered by this study include: Telugu, Malayalam, Marathi, Bengali, Oriya, Naga, and Urdu. *Where There Is No Doctor* and its companion books have traveled with and helped to shape social movements both in India, and around the world: further

[7] Hesperian's other books have each been adapted and translated into a variety of Indian languages, both by VHAI and by other groups and individuals.

background information on this history and dynamics both globally and within India is included in Chapter 2.

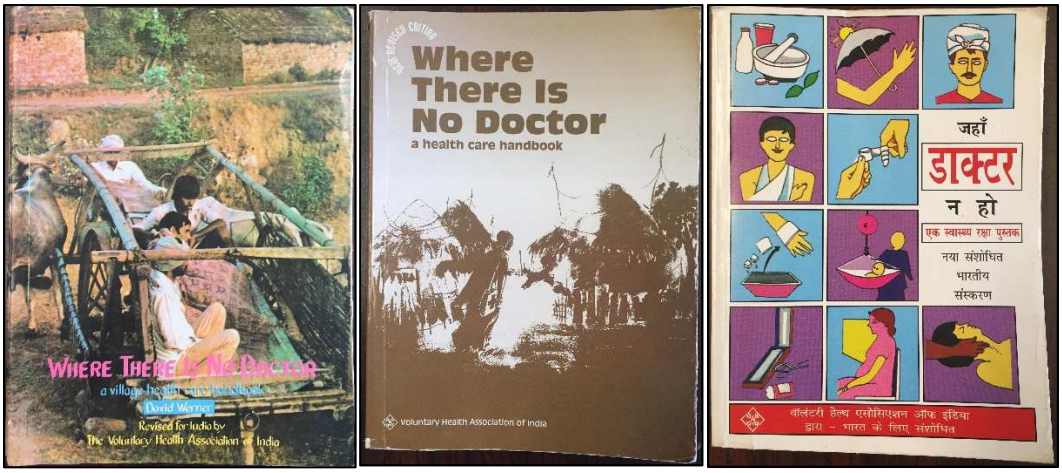


Figure 3: English for India and Hindi editions of *Where There Is No Doctor* published by VHAI (left to right): early (1981) English for India, current (2014) English-for-India, Hindi

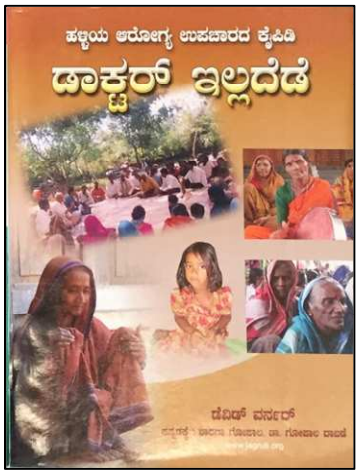


Figure 4: Kannada language edition of *Where There Is No Doctor* published by Jagruti (2011)

Figure 5: Tamil language editions of *Where There Is No Doctor*, published (left to right) by Cre-A (1984), TNVHA (1998), and Adaiyaalam (2013)

Literature Review

A set of overlapping theoretical and empirical frames provide sensitizing concepts that help to explore the ways in which the people translating and adapting Hesperian materials understand their work. These sensitizing concepts also help maintain a focus on the ways in which different kinds of knowledge are created, obscured, shared, and transformed in these processes. First, this research was developed within a postcolonial science and technology studies (STS) frame, as called for by Anderson, Adams, and others (Anderson and Adams 2007; Clarke et al. 2010). Second, I draw explicitly on postcolonial theorists writing from and about India, including Chakrabarty and others concerned with the production of knowledges designated as 'Indian' and 'global.' Third, I build on the work of sociological theorists of lay and expert knowledge production, including Wynne (1996), Popay and Williams (1996). These bodies of work provide a framework to explore the macro, meso, and micro level power structures that inform what kinds of information and experience are counted as knowledge, and how the

designation of those experiences and information as global health knowledge changes their relationship to local and global experiences and institutions.

Postcolonial STS and critical global health studies: locals, globals, and the knowledges produced in between

Warwick Anderson (2002, 2009, 2014) has made a strong case over the past decade for the need for postcolonial studies of science and technology. My work both responds to and builds on this call by conducting an explicitly postcolonial STS study that engages globalization theory, but is designed to retain a focus on the history of interaction and multiplicity of voices (Anderson 2002, 2009, 2014; Anderson and Adams 2007). Anderson's (2002) article "Postcolonial Technoscience" reviews the field and takes a closer look at the multiplying ways in which 'modern' and 'local' are used in contemporary theory, as well the ways in which both terms should be further broken down. He argues that both can and should be located at many levels, and in diverse places: the West[8] does not have a monopoly on modernity, just as the developing world is not the only place that is 'local.' He argues that we need new theoretical tools to understand "the co-production of identities, technologies and cultural formations characteristic of an emerging global order" (Anderson 2002:643), and that postcolonial STS can help to provide those tools.

Though Anderson's framing of postcolonial technoscience is analytically useful on a number of levels, I particularly draw on his breakdown and definition of the term 'postcolonial' and his recognition of the rich histories of exchange and extraction that characterize history and

[8] In this dissertation, I use the word 'west' or 'western' to refer to former colonizer and settler colony nations, and to their cultures and intellectual traditions.

influence the present. The 'postcolonial' part of the equation, Anderson writes, refers to both the entities being studied – the different ways that science and technology work together on a global scale – and to the theories needed to understand these new formations. He argues that the term 'postcolonial' has been used to refer to a variety of related things, from a time period, to a location, to a critique (Anderson 2002:645). In his analysis, Anderson takes a postcolonial perspective to be one that examines the former colony and colonizer in the same space. This does not assume that colonialism is over, but requires a focus on the effects of the history of colonialism on both the metropole and the post-colony. By taking both sites together, and looking at their relationship, a postcolonial STS helps to analyze the ways in which science connects and disrupts local and global networks, as well as the supposed distance between the two.

Seven years after his initial call, Anderson (2009) argued that STS as a field has been overly focused on globalization theory, and that equal engagement with critical postcolonial theory would allow the field to engage more fully with the past and present state of science and technology. He reviews a variety of key STS publications, and assesses their use of globalization and postcolonial theory. He argues that each could be strengthened by a clearer postcolonial analysis. Building on this work, Anderson (2014) then argues that when you leave out postcolonial theory, you leave out a lot of history. He emphasizes the ways in which the world has always been connected, as his triplicate case study of a Philippine revolutionary doctor, Americans researching Kuru, and a new Singapore Biopolis initiative demonstrate. The emphasis on using globalization theory, he argues, leads to excessive use of metaphors about flows, and lends a tone of newness, as if the world were constantly being washed clean by waves of connections. Bringing postcolonial theory in demands an acknowledgement of how the world

has been, and the ways in which current patterns of inequality are directly related to past experiences.

This dissertation responds to and builds on Anderson's call for a self-consciously postcolonial form of science and technology studies. Although Hesperian books have been translated into over 80 languages and used around the world, I was specifically interested in investigating their adaptation and translation in the Indian context because of the colonial history of India, and because of the rich literature available from Indian and other social theorists about this experience and how it has shaped the country. There have been centuries of exchange between Indian civilizations and the West, including rich scientific and artistic exchanges before, during and after the period of colonization (Raina 1996). As an American researcher, I concurrently respond to, research, and enact dynamics of domination, resource extraction, and social movements for equity and sovereignty. I use the guidance of both Indian social theorists (such as those reviewed below) and others in the field of postcolonial STS to tell stories about how different kinds of knowledges are produced and transformed through this particular global health project.

Closely tied to Anderson's conception of a postcolonial STS is a call from Vincanne Adams and others for what they term critical global health studies, which aim to investigate how global health projects have been defined, understood, and analyzed (Adams, Novotny, and Leslie 2008; Biehl and Petryna 2013). The emerging field of critical global health studies is particularly relevant to the investigation of the production, valuation, and dissemination of global health knowledges. The frame it provides helps me to maintain an analysis of the ways in which the creation and movement of global health knowledges relate to histories of colonialism and

development, and shape the ways in which current and future exchanges of knowledge and resources occur.

Some of the most important recent contributions to critical global health studies on the complex dynamics of knowledge production come from the medical anthropologist Johanna Crane (2013), whose work provides an excellent example of the proliferations and breakdowns of locals and modernities that Anderson lays out. Her monograph provides an in-depth analysis of the complex relationship between a UCSF research project and a Ugandan university, as well as a broader look at the productive inequalities that undergird global health knowledge production, and the twenty-first century 'scramble' for Western universities to set up research partnerships across the Global South. One of the most significant contributions of Crane's analysis is her emphasis on the ways in which global health relies on suffering to produce and re-produce itself. Crane's focus on the meso level of knowledge production – talking to researchers and managers in both the US and Uganda – provided a useful example for the meso-level global health actors, including doctors, non-profit managers, and community health worker trainers who I interviewed for this dissertation. The ways in which she conducted research and analysis among people working across geographical and epistemic distance, taking the spaces between them as valid research sites for the production of different kinds of expert knowledges, provided a powerful example for ways to look at how global health knowledge is produced, and how it travels. I emphasize the work of production and translation undertaken by professionals working in India (a former colony and rising world power still facing staggering poverty) adapting materials designated as 'global' (and distributed by an American organization) for contexts designated as 'local.' At the same time, I note how those same actors are producing both those locations and the relationship between them through the acts of adaptation and translation.

Postcolonial theories of knowledge: India as global

Heeding the call of Anderson and others to conduct a consciously critical postcolonial form of STS and global health studies, I turn to postcolonial theorists, many educated in and writing from India. This body of literature was significantly influenced by the Subaltern Studies group, of which one of the most well-known products is Gayatri Chakravorty Spivak's (1988) essay 'Can the subaltern speak?' Starting from a Marxist lens and a consciously third-world intellectual position, she examines *sati,* the practice of Indian widows being burnt alive on their husbands' funeral pyres, analyzing how the history of sati became recorded in Hindu law and interpreted and criminalized by the British. She concludes that 'the subaltern cannot speak,' more specifically arguing that the voice of the female third-world colonial subject is not recorded in history. Her point – that certain voices are excluded from both the historical record and from social theory – provides an important jumping off point for both the work of the Subaltern studies group, and for my own work.

In *Provincializing Europe*, Dipesh Chakrabarty (2000) makes an argument for both the utility and limits of European social thought in theorizing "excolonial" countries such as India. My work heeds his admonitions to look at the use and limits of European theory, and to more fully engage Indian social theory. Chakrabarty argues that European thought history is taught as a living tradition, while South Asian thought history is treated as dead, or in the past. He develops a critique of historicism, what he calls the 'not yet' of historical development theory, constantly asking excolonial countries to wait to progress to later stages of capitalism and democracy. He compares this to the 'now' rhetorical pushback of independence movements, and holds up the Indian example of subverting the 'not yet' narrative by granting a universal adult franchise at a time when only a small portion of the population was literate (a stage argued by

European theorists to be a prerequisite to participatory democracy). From this critique, he picks up the subaltern studies critique of European theorists' categorization of Indian peasants as 'prepolitical,' arguing for the inclusion of gods and spirits as coevolved with humans. The critique of peasants as prepolitical because they act on logics of gods falls apart when those peasants are seen as active participants in the largest democracy on earth, and the gods are seen as part of the expression of humanity.

While his overall critique provides a useful frame for a cautious application of European social theory to understanding Indian and globally connected experiences, Chakrabarty's emphasis on the concept of translation is particularly useful for my project. He argues – following Meaghan Morris (1997) and others (Rafael 1988; Sakai 1997; Spivak 1993) – that the act of translation produces difference, rather than equivalence or domination, and that the spread of capitalism and democracy should be seen through this analytic, rather than the historicist analytics of Western progress. Seeing translation as an effort not to create equivalencies, nor to strictly re-enact domination, leaves space for it to be a messy process of appropriation, creation, and erasure. I engage and build on this, and translation studies (Gambier and van Doorslaer 2010; Wolf and Fukari 2007) more broadly, to argue that translation is a knowledge production process. The translation of Hesperian books into Indian languages takes a product intended to support a pedagogy of the oppressed, coming through a colonial language and from a politically and economically dominant country, and re-creates it for an excolonial audience of low-literacy but politically enfranchised people.

From Gyan Prakash (1999), a member of the Subaltern Studies collective along with Chakrabarty and Gayatri Spivak, I draw the idea that the emergence of India as a nation has been conditioned on the concept of science and its connotations of power. After the 1857 Mutiny, he

argues, and with the transition from the control of the British East India Company to the British Crown, came both a more systematic extraction of resources, and the development of a Western-educated bureaucratic class of Indian civil servants. Taking into account his argument that the power of science as a metaphor is central to the construction of the Indian nation-state, I explore the ways in which postcolonial theory intersects with STS to analyze how ideas of science, knowledge, and health are constructed and mobilized. The majority of my participants are members of the Western-educated Indian middle class, trained in Western medical science, and I used Prakash's work to maintain a reflexivity about the arrival and reconstruction of that tradition in the rich knowledge ecology of India. Finally, from Anna Tsing (2005), I take the metaphor of 'friction' for understanding that global connection is neither totally smooth nor a complete clash, but rather a multifaceted engagement that pushes, pulls, and can be both creative and destructive in the same moment.

Sociologies of knowledge: lay knowledges and the production of expertise

As a sociologist exploring the production, translation, and uptake of health knowledges, my research framing drew on theories of the dynamics of expert and lay knowledges in health, and the ways that these dynamics challenge traditional ideas of scientific knowledge production. Brian Wynne's (1996) book chapter "May the Sheep Safely Graze? A Reflexive View of the Expert-Lay Knowledge Divide" has become a widely cited source for the introduction of a critical view of the idea of the expert-lay divide in the sociology of scientific knowledge. Using environmental science and social movements as a case area, and his own research on Cumbrian sheep farmers as a key example, Wynne analyzes the contemporary state of sociology of science writing on the concept of the expert-lay divide. Wynne's reflexive view provides an important

frame for this dissertation, allowing me to look at knowledge production as a cultural and hermeneutic activity, and to look critically at the construction of knowledges designated as expert and lay. His call to avoid both romanticizing lay knowledge and reifying expert knowledge is especially important to analyzing how different kinds of experiences and information are designated as knowledge and are included and excluded in these published community health guides. Finally, as I explored the process by which Hesperian books are translated and adapted from 'global' (American English) to 'local' (Indian English, Hindi, Tamil, Kannada) editions, Wynne's admonitions provided an important grounding for exploring the ways in which the local, global, expert, and lay are co-constitutive, and are created in exchange with one another.

A second pillar of the sociology of lay and expert health knowledges comes from Popay and Williams (Popay et al. 1998; Popay and Williams 1996).[9] Arguing for the value of lay knowledge about health as a form of expertise, they write that "through a more or less systematic process whereby experience is checked against life events, circumstances, and history, lay people acquire an 'expert' body of knowledge, different from but equal to that of professionals in the public health field" (Popay and Williams 1996:760). My research framing responds to their call to explicitly value lay knowledge in global health by asking in what ways the travels and translations of Hesperian materials represent a valuing of lay knowledge for health, and where and in what ways expert knowledges continue to dominate.

This line of inquiry has continued to be explored, although with less vigor than in previous decades (Potts 2004; Shim 2005, 2014; Springett, Owens, and Callaghan 2007; Weiner

[9] Popay and Williams' theoretical work from the 1990's is frequently cited. They have published some related empirical work with additional co-authors since then (for example, Popay, Bennett, et al. 2003; Popay, Thomas, et al. 2003). Their work has also been built on by other authors, including work on efforts to democratize science, and on public participation in science (Hess 2011; Kerr, Cunningham-Burley, and Tutton 2007; Wright 2005).

2009; Wright 2005). There have also been some rebuttals against the focus on lay knowledges about health. Collins and Evans (2002) and Prior (2003) express concern that expert knowledges are being under-valued. However, both in direct response papers (Jasanoff 2003; Wynne 2003) and in subsequent work in the field (see for example Kerr, Cunningham-Burley, and Tutton 2007), a variety of theorists argue that in fact the reign of expert knowledge in public health remains relatively uncontested, and that efforts to 'democratize' science by bringing in lay knowledge are often relatively cosmetic, and do little to change the underlying balance of power and mechanisms of decision making. My dissertation uses these conversations as a tool to explore ways in which different kinds of knowledge are defined and mobilized, while maintaining a reflexive stance about how such divides are co-constitutive, and often used as political tools to contest and reify patterns of power and representation.

In closing, I would like to note that for the purpose of my research on the production of different kinds of knowledges, it is important to acknowledge that Hesperian materials carry and reflect their own set of theories, significantly influenced by Paulo Freire's *Pedagogy of the Oppressed* (1970). They also reflect the priorities, beliefs, and experiences of the dozens of individuals and groups who contribute to the writing, editing, translation, and adaption of the books. In this way, they may act as a form of traveling theory, similar to the way in which Kathy Davis (2007) characterizes the global travels of the feminist health book *Our Bodies, Oursevles* as a form of traveling feminist theory. By engaging postcolonial theory, science and technology studies, critical global health, and the sociology of lay and expert health knowledges, my research interrogates ways in which different forms of knowledge are codified, transformed, and shared through these books, and how the books themselves act as a form of traveling theory,

spreading ideas about what kinds of knowledge and experiences count for understanding and improving health.

Methods

Research Approach

To produce this dissertation, I used in-depth interviews and grounded theory analysis to characterize global, participatory materials travels, translation, and adaptation processes, and to explore the ways in which they continue and challenge existing dynamics of global knowledge production and distribution. Specifically, I focused on the Tamil, Kannada, Hindi, and English for India adaptations and translations of Hesperian's health guides, including *Where There Is No Doctor*. I selected these four language adaptations because the organizations that adapted and translated into each language have completed multiple books, have been involved with digital and print distribution of materials, and demonstrate both the depth and possibilities of the material adaptation and translation process. Tamil is spoken in Tamil Nadu and Kannada is the primary language spoken in neighboring Karnataka. Hindi is spoken across North India, and the participants for this study live and work in Delhi, where I had institutional support from Jawaharlal Nehru University. Tamil, Kannada, and Hindi are three of the twenty-two languages recognized in the constitution; English and Hindi are the official languages in which government business is conducted. Tamil and Kannada are both from the Dravidian language family while Hindi is an Indo-Aryan language (see Figure 2 above).

I used grounded theory (Charmaz 2014) because it focuses specifically on generating theories to understand social processes and actions – in this case, to generate theories about

processes of participatory materials development. In addition, grounded theory provides theoretically-informed approaches for collecting and analyzing data, focusing on interviews with theoretically selected participants, as well as self-reflective and analytic memos. Critical and feminist epistemologies provided additional insight into the complex relationship between 'researcher' and 'respondents,' while helping me to focus on foregrounding the theoretical contributions of the participants as analytic contributors and not just 'data.' Heeding Michelle Fine's (1994) advice to "self-consciously work" the "other-self hyphen" helped me to maintain my reflexivity about both recognizing difference and not constructing research participants as an Other lacking agency. Building on this effort, and following Mariolga Reyes Cruz (2008:652), I claim research participants as "part of my intellectual grounding, not my data collecting." I was employed by Hesperian for five years: memos from this period include reflexivity about my roles as part of the analytic process.

Interview Recruitment and Consent

Information on translation partners is publicly available on the Hesperian website. I identified the initial list of potential participants based on the public list, and with the support of Hesperian staff, and screened potential participant eligibility based on Hesperian's knowledge of their relationship with the organization. Hesperian staff provided the email addresses of identified potential participants, and contacted them with an initial recruitment email.[10] If potential participants expressed interest by contacting me, a mutually agreeable location, date, and time was set for the interview. Two follow-up recruitment emails were sent by Hesperian after the initial letter to those who had not responded. I started by interviewing the main contact

[10] This style of outreach was specifically requested by the UCSF IRB during my pilot study.

for books into each language (see Table 1 below), and used snowball sampling from there to reach out to people involved in different aspects of the translation and adaption.

Table 1: Language editions by book and language (completed or in process at start of field work in fall 2015)

Book	**Hindi**	**Tamil**	**Kannada**
Where There Is No Doctor	✓	✓	✓
Where Women Have No Doctor	✓	✓	✓
Helping Children Who Are Blind	✓	✓	✓
Helping Children Who Are Deaf	✓	✓	
A Health Handbook for Women with Disabilities	✓	✓	
A Community Guide to Environmental Health	✓	✓	
Helping Health Workers Learn		✓	✓
Disabled Village Children	✓		
A Book for Midwives	✓		
Where There Is No Dentist		✓	

During field work, it became clear that because of the public database of translators on the Hesperian website, and the limited number of people involved at high levels of decision making for each translation, it would be difficult to fully anonymize many key participants in the analysis. I received approval for an updated consent process, in which participants who had already completed interviews could choose to go 'on the record' or maintain their anonymity, and in which new participants could choose to be referred to by name or by a pseudonym. I requested that participants send me suggested pseudonyms if possible, as their knowledge of an appropriate name would be more precise than mine. All names included in this dissertation are real, unless noted otherwise.

Interview and Observation Procedures

Interviews were conducted in person unless the participant requested otherwise, and were based on an interview guide (Appendix A). Interviews lasted between ten minutes and three hours (most were between 30 and 90 minutes), and a demographic questionnaire was verbally administered at the end of the interview.[11] Follow-up interviews with a limited number of participants were scheduled when additional information was needed to follow up on initial findings.

Interviews explored how participants have translated, adapted, provided feedback on, and used the materials, and how they thought about the role and interaction of different kinds of health knowledges in this process. During the course of interviews, I asked for specific examples from the translated books that demonstrated principles or outcomes the participant was describing, and reviewed the relevant content with the participant when possible. Interviews were conducted primarily in English: the majority of participants have been involved in translation from English, and speak multiple languages. During field work, it became clear that having the option to interview participants in Hindi, Tamil, or Kannada would provide a richer data set, and facilitate the inclusion of a wider range of people who supported translation, distribution, and use of the books. Interviews in those languages were conducted with appropriate translators, generally one of their co-workers who was also a participant. I have training in basic spoken and written Hindi, which helped with building rapport.

During interviews, informal observation was also conducted to record emotional responses, non-verbal communications, and other environmental cues. In the course of

[11] Although the initial demographics included a question on race, during field work it quickly became clear that this is not a salient category in India. I adjusted the questions verbally to explain this shift and to ask about race, ethnicity, or nationality. For a future version of this study, I would consult further with Indian social science researchers on the best way to address questions of caste, religion, and other major identity groups.

fieldwork, there were a variety of opportunities to observe translation and organizational processes, including community health worker trainings and interactions using the English for India, Hindi, Tamil, and Kannada language editions. Field notes and memos were written throughout the process. All recruitment and data collection procedures were approved by the UCSF Institutional Review Board.

Interview Sample

I conducted a total of 63 interviews with key Hesperian partners across India and California (see Tables 2 and 3 below). Out of the initial outreach, eight participants involved in Hindi and Tamil translations over the past 40 years did not respond after three emails. I conducted two interviews with people who worked on Kannada translations,[12] ten with people who worked on Tamil translations, 20 interviews with people who worked on English and/or Hindi adaptations, and one interview with a participant who worked only on a Hindi translation. In addition, I conducted four interviews with people I designated as 'community' participants, who had not directly worked on a translation or adaptation, but who have been key players in networks through which the books travel. I conducted a subset of interviews focused specially on how the book was being used, including 12 interviews with missionaries using English editions, and nine interviews with people using English and/or Hindi editions in a rural community health center: these affiliations represent two core groups out of those who actively use the books. I conducted observations with a variety of participants across language categories. Finally, I conducted five interviews with current and former staff and volunteers of the Hesperian Health

[12] This number is so low because there are fewer books translated into Kannada than into the other languages, and most are done by the same couple. The translator for *Helping Children Who Are Blind* passed away before the study began.

Guides office in Berkeley, CA who have been involved with supporting translation. This full sample includes participants representing different roles in the materials development, adaptation, translation, distribution, and use processes. Interview and observation participants are medical doctors, public health professionals, ministers, journalists, social workers, and publishers. All participants quoted in this dissertation are of South Asian descent and currently live and work in India. Demographics of the data sample are included below, in Table 4.

Table 2: Interviews and observation participants by category

Category	**Interview**	**Observation**
Tamil translation	10	2
Kannada translation	2	7
English and/or Hindi translation	20	2
Hindi translation only	1	0
Community (networks of distribution)	4	0
English (use subsample)	12	6
English and Hindi (use subsample)	9	6
Hesperian office affiliated	5	0
Totals	63	23

Table 3: Books participants worked on and/or used

Relevant books	**N (%)**
Where There Is No Doctor	53 (84)
Where Women Have No Doctor	9 (14)
Helping Health Workers Learn	6 (9)
Disabled Village Children	6 (9)
A Community Guide to Environmental Health	4 (6)
A Book for Midwives	3 (5)
A Health Handbook for Women with Disabilities	3 (5)
Helping Children Who Are Blind	2 (3)
Helping Children Who Are Deaf	1 (2)
Unpublished manuscript for Early Assistance series	1 (2)
Others (including Where There Is No Dentist)	16 (25)

Table 4: Research sample demographics

Characteristic	N (%)		Characteristic	N (%)
Age, mean years (range)	48 (23-76)		**Location born (by state)**	
Gender			Tamil Nadu	13 (20)
Female	26 (41)		Madya Pradesh and Chhattisgarh	7 (11)
Male	37 (59)		Karnataka	6 (9)
Nationality			Jharkhand	6 (9)
India	58 (92)		Delhi	5 (8)
US	5 (8)		West Bengal	5 (8)
Education			Orissa	3 (5)
High school or less	12 (19)		Kerala	3 (5)
Bachelors or equivalent	12 (19)		Maharashtra	2 (3)
Masters (non-clinical)	10 (16)		Uttar Pradesh and Uttarakhand	2 (3)
Clinical training (MSW, Nursing, other)	7 (11)		Andhra Pradesh and Telangana	1 (2)
Clinical training (MBBS[13] and/or MD)	15 (24)		Rajasthan	1 (2)
PhD or other doctoral training	7 (11)		Haryana	1 (2)
Languages spoken (exceeds 100% due to multiple languages spoken)			Gujarat	1 (2)
English	57 (90)		Outside India (Bangladesh, Indonesia, US)	7 (11)
Hindi	48 (76)		**Currently living (by state)**	
Tamil	17 (27)		West Bengal	15 (24)
Kannada	14 (22)		Karnataka	12 (19)
Bengali	15 (24)		Tamil Nadu	11 (17)
Other major South Asian languages (Malayalam, Telugu, Oriya, Marathi, Punjabi, Urdu, Sanskrit, Nepali)	26 (41)		Chhattisgarh	10 (16)
Other Indian languages (Badaga, Korku, Gondi, Tulu, Mundari, Kharia, Kurukh, Sadri, Santali, Oraon)	20 (32)		Delhi	9 (14)
Other major languages (French, Spanish, Portuguese, German)	8 (13)		Orissa	1 (2)
			Outside India (US)	5 (8)

[13] Bachelor of Medicine, Bachelor of Surgery (abbreviated from the Latin to MBBS).

Data Analysis

All interviews were digitally recorded. Recordings were transcribed and de-identified as soon as possible. Interviews conducted in multiple languages (English and either Hindi, Tamil, or Kannada) were transcribed in the relevant alphabets by someone fluent in both languages, and then translated by the transcriptionist. Interviews were coded using a line-by-line coding methodology and qualitative research software. A code list of 343 codes was developed over the course of the coding process, and both applied to and informed by later interviews. Memos were written throughout the process, and included explorations of codes and analysis of key quotes and phrases, as well as on my own positionality. I also constructed and wrote memos about a series of situational, positional, social worlds/arenas, and other maps informed by situational analysis (Clarke, Friese, and Washburn 2017). First, I created messy situational maps, both while designing the project, and as I was starting data analysis. These maps lay out all actors and forces in the situation, written across a blank sheet. Second, I created positional maps, both while in the field and after returning. These identify potential positions that are taken (or not) in the data, across two or more axes. Third, I created social worlds/arenas maps as I was finishing data analysis. These maps lay out social worlds and arenas, participants, books, and organizations, showing relationships to one another. Analysis began during the interview process, so that emerging themes informed later interviews. Themes were discussed with my advisors in India and the US, as well as with participants during later interviews.

International Collaboration and Mentorship

My international collaboration and mentorship plan drew on the strengths of the Center for the Study of Social Systems at Jawaharlal Nehru University, St. John's National Academy of

Health Sciences and Research Institute, and UCSF. Professor V. Sujatha, a medical sociologist in the Center for the Study of Social Systems at Jawaharlal Nehru University in Delhi, one of the preeminent institutions for critical social theory in India, provided institutional, methodological, and theoretical support to my research. Specifically, Professor V. Sujatha is interested in the epistemic and political significance of lay, expert and non-expert knowledge (Sujatha 2007), and provided mentorship to support my exploration of these dynamics in the context of the history of community-based health programs in India, as well as the larger global health arena. During the 9 months of my fieldwork, I was based in Delhi, where I had academic support from JNU and conducted interviews and observations on the English for India and Hindi language editions.

Dr. Bobby Joseph served as my St. John's mentor in Bangalore, India, and provided support and guidance for the community health aspects of my project. Dr. Joseph is the head of the Department of Community Health, and has extensive experience training community health workers using *Where There Is No Doctor*. I conducted three visits to St. John's in Bangalore, and traveled in the states of Karnataka (where Bangalore is located) and neighboring Tamil Nadu, conducting and analyzing interviews and observations on the Kannada and Tamil language editions. I also traveled to Kolkata, West Bengal, and to Bilaspur, Chhattisgarh for additional fieldwork focused on the use of the books. After returning to the US, I collected additional data from Hesperian employees and volunteers.

Pilot Project

This dissertation builds on a qualitative pilot study I conducted in 2013-2014, based on interviews with six Hesperian partners around the world. In the study, I found that the participants, all public health professionals and medical doctors, felt that Hesperian's

participatory materials development process elicits and integrates different forms of knowledge, inviting wide ownership and adaptation. Three key themes emerged: ownership of the knowledge production process primarily came through local translations; knowledge production was understood as a group process that builds community; and various forms of community-based and medical knowledge were differently valued and integrated by different partners. One pilot study participant is based in India, expressed enthusiasm about expanding the project, and agreed to act as a key informant. For my dissertation, I followed participants' focus on the importance of local translations, and designed this project around the experiences of the individuals and organizations who have translated and adapted Hesperian materials into Indian language editions.

Overview of Dissertation

C. Sathyamala, who first adapted *Where There is No Doctor* for use in India on behalf of VHAI, describes the book as a paradigm shift:

> It was a true… Kuhnian paradigm shift in publication, in creating material. Because [in a] Kuhnian paradigm there is a discourse that takes place and then there is a shift. Then everybody comes and then they continue with the [new] discourse. What is happening now is that people, including Hesperian, are using the same idea and again and again 'til we have another shift. So [with] *Where There is No Doctor*, there is no doubt that it was this [kind of paradigm shift].

This dissertation takes the book as this kind of paradigm shift (Kuhn 1962): the introduction of a new idea in science (in this case, health) that creates a new paradigm of 'normal science' (in this case, a Freirean vision of community health texts). Chapters 2 through 4 of this dissertation

explore this paradigm shift on three levels – in terms of the push and pull of technical and political interventions in health, in terms of localization and global travels, and in terms of translation and the production of knowledge. They also trace the book across analytic levels, from macro to micro levels of analysis.

Chapter 2 opens with a macro-level view, taking the books as complete objects, and tracing the political and social movements with which they traveled, and that their travels influenced and illuminate. It analyzes the tension between providing individual medical treatment and changing the social, political, and economic conditions that create health and illness as an ongoing challenge that permeates debates on the best ways to address health inequities. Specifically, it explores this core tension through the ways in which translators, editors, and users of *Where There Is No Doctor* perceive the book as technical, political, or a combination of both that can be taken apart and repurposed. The chapter starts with the historical background that informed my construction of the maps, and then leverages a social worlds/arenas map to engage with the concepts of immutable mobiles and non-human actants as introduced in Actor Network Theory. Any sociological project that follows a text must take account of the contributions of Actor Network Theory (ANT) in highlighting the role of non-human actors in social action. I draw on Latour (2007) and others' work in this area, and critique and build on it using Situational Analysis and boundary object theory (Star and Griesemer 1989). Specifically, I engage Situational Analysis (Clarke 2016b; Clarke et al. 2017) as a participatory, decolonizing, and (post)colonial theory-methods package, taking seriously the invitation to work across that hyphen. I apply these theoretical lenses to the travels of *Where There Is No Doctor* in India, focusing on ways translators, editors, and users perceive the text as a technical tool versus a political book. I argue that *Where There Is No Doctor* travels as a non-human actant, as

interpreted by Situational Analysis, and is constructed as a boundary object by those who interpret the book as technical and/or political and adapt and use it accordingly. Building on this, I argue that the travels of *Where There Is No Doctor* are constructed by, restructure, and demonstrate the dialectic relationship between technical and political responses to health inequities

Chapter 3 engages a meso-level view, focusing on how the books travel. It explores the ways people change the books, the ways they stay the same, how the texts achieve this agility, and the work this type of agility makes possible in terms of the organization of knowledge. The books are agile because they travel and change, and because of the way in which they travel *because* they change. I use two empirical arenas – changing illustrations and herbs across adaptations and translations – to argue that it is the layered localization of *Where There Is No Doctor*, traveling with and in pluralistic contexts, that make it a successfully global object. First, I argue that the ways illustrations are adapted demonstrate how this flexibility makes the book a successfully global object: its invitation and ability to change, while remaining recognizable, has allowed it to travel across 80 languages. This is an astounding reach, far beyond the geographic, linguistic, and cultural diversity that most health interventions hope to achieve. Second, I argue that *Where There Is No Doctor* travels in medically pluralistic India because the book itself is medically pluralistic and includes critiques of herbal and allopathic medicines that are carried with it. Analyzing the adaptations of herbal remedies in the book, I argue that this represents an institutionalization of what Sujatha (2007) terms medical lore, a form of medical knowledge that is rarely acknowledged as having value, and that privileges and integrates lay knowledges.

Chapter 4 focuses in still further in on a micro-level view of language, and the way that new knowledges are produced in translation as editors look for and create language intended to

be comprehensible and motivational. It responds to the call to build a consciously postcolonial STS, which must engage with the movement and production of knowledge across difference, and specifically across language. I argue that the translation and adaptation of *Where There Is No Doctor* and the books it inspired have opened space for translators, clinicians, and villagers to create and circulate new health knowledges. Focusing on Tamil-language translations, this paper traces three aspects of translation, and the health knowledges produced in the process. First is the effort to find language that is comprehensible, and that will make understanding possible. Second is the effort to find language that will create opportunities for the reader to act in new ways, to motivate them to take new and different actions. The relative success of these efforts are then assessed by gathering feedback from readers to improve comprehensibility and motivation. The third aspect of health knowledge production comes after publication, in the circulation of new vocabulary with and beyond the books. Taking these pieces together in a postcolonial STS frame, I argue that the collaborative knowledges produced in these translations are new. I provincialize the American English editions of the books, centering Tamil translations and the production of new knowledges in the writing of these texts. This chapter was submitted to the journal *Engaging Science and Technology Studies*, and received an invitation to revise and resubmit. The text is included here in the form in which it was originally submitted to the journal.

Chapter 2 – Mutable mobiles: from hope handbooks to taking sides

Introduction

C. Sathyamala was a young doctor, interested in social medicine and troubled by the limitations of 'modern medicine,' when she was asked by VHAI, a Delhi-based voluntary organization, to adapt *Where There Is No Doctor* for use in India. It was the late 1970's, and she spent about six months on the project, gathering feedback from colleagues around the country. Although she did not stay long at VHAI, and other editors have taken over and further adapted the English for India edition in the years since, her name is among those most closely associated with *Where There Is No Doctor* in that country. She recalled visiting a community health program in Hoshangabad, where colleagues were giving feedback on the book, when someone described it as a "technical tool." She considered this description, in contrast to thinking of the text as a "political book," and realized she agreed:

> Yes it's a tool, it's a technical tool. It's like a stethoscope or whatever. So you can [use] that and you know what context it's been used [for]… It gives the appearance of being a political book but it is really not… It is a very adaptable book because whatever little politics it has can be taken out... I won't say it's a limitation but that is a characteristic of the book.

Sathyamala finished the adaptation. Then she set out with two friends to write her own health text, one whose politics could never be ignored or taken out. The title, *Taking Sides: The choices before the health worker* (Sathyamala et al. 1986), refers to the idea that health care work can never be neutral and inevitably 'takes a side:' either the health workers choose to stand with the people they serve, or, by not standing with them, they choose to stand against them. *Taking*

Sides focuses on a political economy of health in India, using the story of a newly appointed community health worker to trace issues facing poor people, and how these are expressed in health. The book was published in 1986 by Anitra Trust and updated once: it was also translated into Hindi around 2001. It is no longer in print, although copies are available. *Where There Is No Doctor,* which also bears her name, is still being adapted, translated and printed, although it is less widely used than it was in the 1980's and 90's.

The tension between providing individual medical treatment – which Sathyamala describes as a technical solution, and associates with a stethoscope above – and changing the social, political, and economic conditions that create health and illness is an ongoing challenge that permeates debates on the best ways to address health inequities. This chapter explores this core tension through the ways in which translators, editors, and users of *Where There Is No Doctor* perceive the book as technical, political, or a combination of both that can be taken apart and repurposed. "Political," as Sathyamala is using the term, and as I use it in this chapter, denotes a power analysis of the social structures in society, and when discussing something like *Where There Is No Doctor*, specifically how those social structures affect health. Among the participants I interviewed, the word "political" also generally referred to left-wing politics, which in India encompasses a broad range from relatively centrist socialist national governing parties to communist state governing parties, to people's movements and professional activists, to armed Maoist rebels drawn from disenfranchised communities. Each participant would have a different definition of the words "left" and "political," excluding or including various groups and types of action, but all would identify themselves somewhere along that spectrum. Their varying political identifications, and their varying relationships to books such as *Where There Is No Doctor*, in turn exemplify how they navigate debates on how best to address health inequalities.

This chapter draws on data from a wide range of participants from the larger dissertation project, including both individuals involved in the direct adaptation and translation of *Where There Is No Doctor* and related books, and participants who have played leadership roles in the networks through which the books have traveled. Some use the books for training, others read them at some point but reference them mostly as symbols. While analyzing and writing this chapter, I drew on situational analysis (Clarke et al. 2017) to construct a series of maps. Situational analysis (SA) is a theory-methods package, and for the development of this chapter I utilized situational, positional, and social worlds/arenas maps to develop a grounded theory analysis (Charmaz 2014; Clarke et al. 2017). Specifically, I constructed positional maps to explore patterns that emerged during data collection, focusing on the relationship between the community health worker model, the rise of organizing around the right to health, the role of government in promoting health, and changes in the use of *Where There Is No Doctor*. After thinking through the relationship between training people to provide health services and training them to advocate for access to government provision of such services, participants often started to reflect more conceptually on where they understood health to come from, and how they work with communities to try to make that a reality. The results of these conversations and contentions, as well as their relationships to the travels and uses of *Where There Is No Doctor* and its companion books inform the following analysis.

In addition to creating positional maps, I created a series of social worlds/arenas maps, starting with 'community health in India' as the arena, and experimenting with various levels of analysis and inclusion of texts and implicated actors. The final map, which centers *Where There Is No Doctor* for use in India as the arena across which social worlds overlap, is included in the analysis below. The chapter starts with the historical background that informed my construction

of the maps, and then leverages a social worlds/arenas map to engage with the concepts of immutable mobiles and non-human actants as introduced in Actor Network Theory. I argue that the reframing of the agency of non-humans as conducted in situational analysis and the theory of boundary objects provide needed analytic leverage for this project. I then apply these theoretical lenses to the travels of *Where There Is No Doctor* in India, focusing on ways translators, editors, and users perceive the book as a technical tool versus a political book. I argue that *Where There Is No Doctor* travels as a non-human actant, as interpreted by situational analysis, and is constructed as a boundary objects by those who interpret the book as technical and/or political and adapt and use it accordingly. Building on this, I argue that the travels of *Where There Is No Doctor* are constructed by, restructure, and demonstrate the dialectic relationship between technical and political responses to health inequities.

Historical framing: Health for All!

This analysis is situated within the history of primary health care and right to health[14] social movements, and the interplay between government and community-based programs designed to provide health care, as well as the conditions conducive to health (see Figure 6 below for timeline). *Where There Is No Doctor* has traveled with these movements and has both influenced and been influenced by the interplay of government and community programs. During the 1970s, and into the 1980s, the primary health care movement helped to place a focus on the importance of prevention and community health across the global south. Community

[14] Right to health is used here refer to broad movements to change the social and structural determinants of health (Kavanagh 2013). It is sometimes used in a narrower sense to refer to a right to health care.

health worker training programs were integral to this movement, recruiting and training people, usually women, to provide basic preventive and primary care services for the communities in which they lived. This was especially important in rural areas, but such programs were also started in urban settings.

In 1978, the World Health Organization's Declaration of Alma Ata promoted the primary health care movement in an international statement, with the goal of 'health for all' by the year 2000 (WHO 1978). However, within a few years these broad ideas were simplified by the WHO from *comprehensive* primary health care to *selective* primary health care, focusing on specific interventions identified as those most likely to make measurable changes in health outcomes (Brown, Cueto, and Fee 2006; Walsh and Warren 1980). With the global rise of neoliberalism, and the slashing of country health budgets around the world under pressure from the International Monetary Fund and World Bank's structural adjustment programs, the focus of mainstream global health moved quickly towards disease-specific programming and away from prevention and primary care.[15] In response to this shift, and the failure of national and global leaders to achieve 'health for all,' as Alma Ata had declared, the People's Health Movement (PHM) was inaugurated in the year 2000 by health professionals and organizers from the global south to strengthen the right to health movement (PHM 2006). Many individuals and organizations who had used, translated, and disseminated *Where There Is No Doctor* were involved in the founding of PHM. When PHM expanded to include individuals and organizations in industrialized nations, Hesperian Health Guides, the Berkeley-based publisher of *Where There Is No Doctor*, became a founding member of the US circle.

[15] For more on the transition from 'international' to 'global' health see Brown et al (2006). See Keshavjee (2014) for more on neoliberalism and global health.

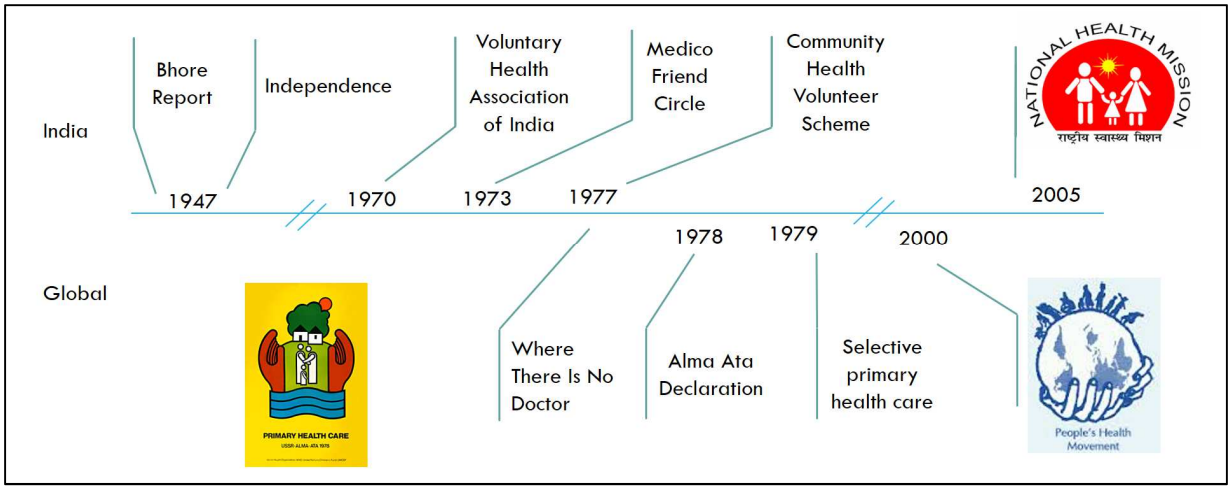


Figure 6: Timeline

Community health in India

The history of community health movements in India is closely tied to these global trends and influenced them in turn. Before India's independence in 1947, a committee was set up to make proposals for a future health system, and the Bhore Report, published in 1946, recommended a community-based vision (Bhore 1946). This vision included the integration of preventive and curative health services, the development of primary health centers across the country, and changes in medical training to promote preventive and social medicine (NHP 2015). While the post-independence government did not create the kind of community health system envisioned, a variety of non-governmental community health programs were created by civil society groups and doctors hoping to make an impact at a grassroots level. The Comprehensive Rural Health Program, founded in 1970 in Jamkhed, Maharashtra, is one well-known example (Arole and Arole 1994). This program, and others like it, inspired a government-run community health worker program, called the 'community health volunteer (CHV) scheme,' which was established in 1977, recruited mostly men, and ran for 25 years (Maru 1983). A few years before,

health activists across the country had formed the Medico Friend Circle (MFC): the group and its members have built and influenced community health programs across the country, and continue to shape health policy and programming (MFC 2016). In 2000, many members of MFC also helped to form Jan Swasthya Abhiyan (literally 'people's health movement'), one of the founding country chapters of PHM (JSA 2016).

The central government decided that it was financially unsustainable to provide honorariums for 'volunteer' workers in the CHV scheme, and the program was discontinued in 2002, with the option for states to run their own related programs if they could raise the funds (UNICEF 2004). That year, the government of the newly formed state of Chhattisgarh created a community health worker program, called the Mitanin program,[16] to reach their largely poor, rural, and tribal population (Sundararaman 2007). When the central government created the National Rural Health Mission in 2005 to improve the health of underserved communities,[17] the success of the Mitanin program was a source of inspiration for a new national female community health worker cohort, called ASHAs, or Accredited Social Health Activists. *Asha* means 'hope' in Hindi. There is now an urban as well as rural health mission under the updated National Health Mission, which supports 900,000 ASHAs, likely the largest cohort of community health workers in the world (NHM 2016b).[18] Including the phrase 'activist' in the name was inspired by the role of health social movements in community health worker programs. However, this move was referred to by many of my participants as an empty gesture, noting that ASHAs represent

[16] Mitanin translates approximately to 'friend' but can also be interpreted to denote a deeply meaningful connection. From the founding of the program, there has been debate on the use and appropriation of the term (Sen 2005).
[17] The NRHM was founded as part of an integration plan for a Reproductive Child Health Program that was initiated and built with funding from a variety of multilateral institutions, including the European Commission, the World Bank, WHO and bodies of the United Nations. Participants in this project were part of this development and integration.
[18] ASHAs are paid based on services they perform but are not paid a salary; there is active and ongoing organizing around this issue. A variety of related health initiatives have also been launched, including the Rashtriya Swasthya Bima Yojana health insurance program for families living below the poverty line (RSBY 2008).

depoliticized agents of the state, rather than a voice of the community. These tensions are discussed further below: to fully engage them, I turn first to the theoretical tools necessary to analyze the travels of *Where There Is No Doctor*, and the tensions between political and technical responses to health inequities that these travels reveal.

Theoretical findings: *Where There Is No Doctor* as a mutable mobile

This dissertation takes *Where There Is No Doctor* seriously as both a physical object and as a traveling package of ideas. As a method, I follow Clarke and colleague's instructions to "follow that 'x'" to "understand its networks and broader situation of action" (2010:393). This injunction draws on a tradition of taking non-human objects seriously in an analytic context, which builds on the work of Latour and others. For this chapter, I take up two interventions that build on and critique Actor-Network Theory and the framing of immutable mobiles – non-human actants as characterized in situational analysis by Clarke and colleagues and boundary objects as developed by Star and colleagues – that provide key analytic ballast for analyzing the travels of this book in and around India, and the social movements and concepts of health that it traveled with and helped to shape. Specifically, I take *Where There Is No Doctor* as a non-human actant that functions as a boundary object. I do this within a framework of situational analysis and utilize situational worlds/arenas maps to conduct analysis.

Latour and colleagues, in their development of Actor-Network Theory (ANT), made an important intervention in the Western cannon of social theory when they put forward the idea that what they called non-human actants should be included on an equal level with human actors in analytic inquiry (Latour 2007). In ANT, all actors and actants are 'laid flat,' and given equal

epistemic ground, in order to analyze the networks of action that they form. ANT is concerned with the creation of obligatory passage points for the stabilization of scientific knowledge – such as Pasteur's laboratory for the development of microbiological research in late 1800's France – and the ways in which complex and sometimes seemingly unrelated people, objects, and ideas interact to create new knowledges. Obligatory passage points, introduced by Callon (1984) in a study of the domestication of scallops, are points at which a group of actors has enrolled other actors into their vision of a project and act as gatekeepers for future action. Within ANT, the concept of 'immutable mobiles' is key. Latour developed this concept based in part on an examination of the ways that numbers traveled as part of colonial practices: signs that stay the same (are immutable) across distance, and travel (are mobile) because of that. He was also interested in the collection of astrological data to make sky charts, the collection of census data to construct economic models, and the paper forms that these collections of knowledge both rely on and take. These forms, he argues, were developed as inscriptions moved towards having the qualities of "mobility, stability, and combinability" (Latour 1987:236). Such immutable mobiles then make important objects of study – because they are mobile yet create stability across spaces, and because they are the result of the work of a network of actors, actants, and ideas traveling through increasing forms of stabilization until they are written down in a knowledge structure that can travel across considerable distance while meaning the same thing in each location.

The epistemological intervention that ANT made by taking seriously non-human actants, and that the concept of immutable mobiles provides in terms of how packages of ideas travel, are key to this dissertation. However, *Where There Is No Doctor* in many ways provides a counter-example to this concept, in that it is an example of a *mutable* mobile – something that travels (is mobile) because it changes (is mutable). It was never meant to stay the same, or to mean the

same thing across distance: instead, it was designed to travel by changing. Similarly, there was no effort to place the book as an obligatory passage point, or to create a stabilized network around it. Therefore, I have turned to situational analysis and boundary objects, along with other theoretical tools, as necessary additions that have built on and critiqued ANT. Specifically, three critiques are particularly useful for my analysis in this chapter: critiques of the focus on stabilization of networks, of the creation of a single obligatory passage point, and of the lack of attention to the power relations inherent in the co-construction of actors and actants. Using empirical data to find points of friction, I argue that translations and adaptations of *Where There Is No Doctor*, as well as books it has inspired and influenced within India, travel as mutable mobiles, functioning as non-human actants as interpreted in situational analysis, and are constructed as boundary objects. In this theoretical findings section, I engage first with situational analysis and second with boundary objects theory, and develop the groundwork for engaging these three critiques. In the empirical findings section that follows, I then engage those critiques to argue that the travels of *Where There Is No Doctor,* both within and outside the pages of the book, reflect ongoing tensions between the way that people understand health inequities as a technical and political problem to be solved.

Mapping mutable mobiles: Non-human and implicated actors in situational analysis

The first intervention I take up is Clarke's reframing of non-human actants for situational analysis[19] (which I abbreviate as NHASA). Clarke and Casper (1998:257), writing about the development of the Pap smear, note that they

[19] Here, Clarke and Casper draw and build on the work of symbolic interactionism, which posits that (1) humans act toward objects based on their meanings, (2) this meaning arises via social interaction, and (3) the individual processes and interprets this meaning and acts accordingly (Blumer 1986).

> … disagree with actor-network theorists that it [the Pap smear] should be analyzed symmetrically with 'human' actors, or even that all human actors should be accorded the same analytic stature. In our view, all actors (whether human or non-human) are assigned ontological status and significance within social worlds of meaning by the actors involved themselves, and understanding these attributions tells us much about the distribution of power in these arenas… Eschewing symmetry and the 'executive approach' it can spawn, we opt instead for asymmetry, for a political and theoretical perspective.

Clarke and Casper criticize ANT for 'flattening' power dynamics by according all aspects "the same analytic stature." Such an asymmetrical approach is key to SA as an explicitly postmodern and feminist theory-methods package, and as a participatory, decolonizing, and (post)colonial approach (Clarke 2016b). It is similarly important here, for a project that traces an object that both travels as a book and as a package of ideas, with a popular education (Freire 1970) pedagogy, and that is constructed variously as a technical and/or political object by different actors based on their beliefs in the kinds of interventions needed to achieve health for all.

Another, and related, key intervention is Clarke and Montini's (1993:45) concept of "implicated actors," which they developed in their analysis of an abortifacient drug to bring in the women who would be able (or not) to access this technology:

> The actors to be analyzed in an arena analysis are not only those individually and collectively "present," articulate, and committed to action in that arena but also those implicated by actions in that arena. That is, the actions taken in that arena will be consequential for them, regardless of their current presence, organization, or action.

Implicated actors have since become a key part of SA. Clarke and Montini point out that such actors are often objectified and constructed by other actors with greater power in the situation. Because of this, implicated actors are hard to track and analyze, as they are often left out of or constructed mainly for the use of others in the historical record.

In this project, applying the asymmetrical stance and centrality of implicated actors underscores the power relations inherent in the dialectic tensions between providing direct services and using the technical tools of health to reduce immediate suffering and using a political lens to address the larger forces that affect health and illness. Specifically, it is important to analyze the variety of meanings that human actors accord to *Where There Is No Doctor* as a NHASA, and that these differ based on the position of the human actors, and the social worlds of which they are a part. In addition to analyzing the meanings human actors accord to a non-human actant like *Where There Is No Doctor*, it is important to analyze the potential readers, users, and beneficiaries of health projects who are constructed by varying social worlds and implicated through this process. In the situation described in this analysis, implicated actors include both the specific group of people who might read, listen to, and otherwise benefit from *Where There Is No Doctor*, as well as the larger group of people in need of health services and support in India. This group is significantly poor and rural but includes a large urban population as well. Overall, these implicated actors are those without the financial and logistical means to access the conditions for good health, as well as the health care services that would support health and address illness. They are constructed by other actors in the situation: by those designing and providing health services as potential beneficiaries, and by those adapting and translating *Where There Is No Doctor* as potential readers, listeners, and users. As we shall see below, attending to how these potential beneficiaries are variously conceived of by other actors within different social worlds in this arena then tells us something about how those actors navigate questions of where health comes from, what inequalities in health can be attributed to, and how best to respond to and intervene on those inequalities.

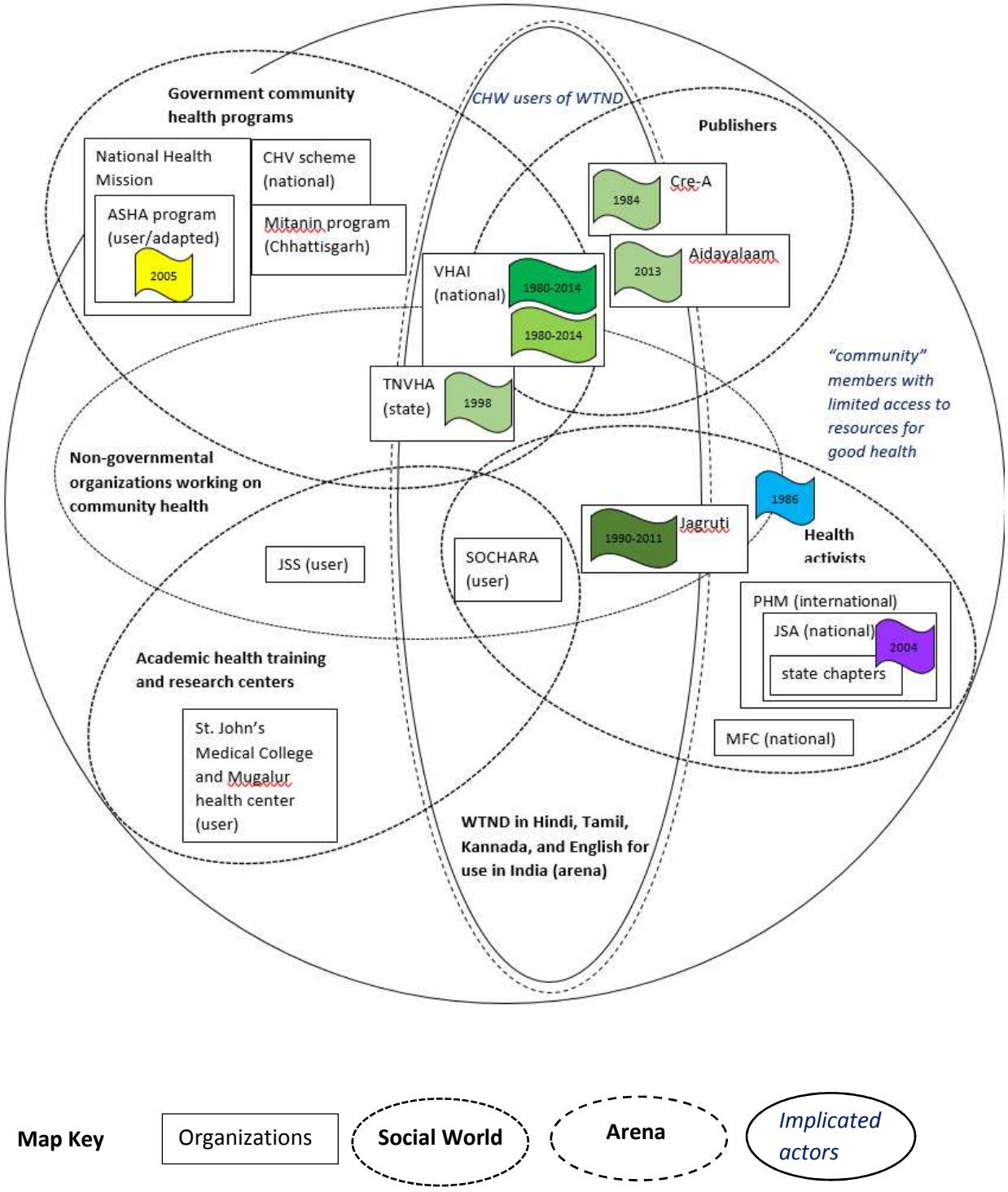


Figure 7: Social words/arenas map of *Where There Is No Doctor* (WTND) in Hindi, Tamil, Kannada and English for use in India

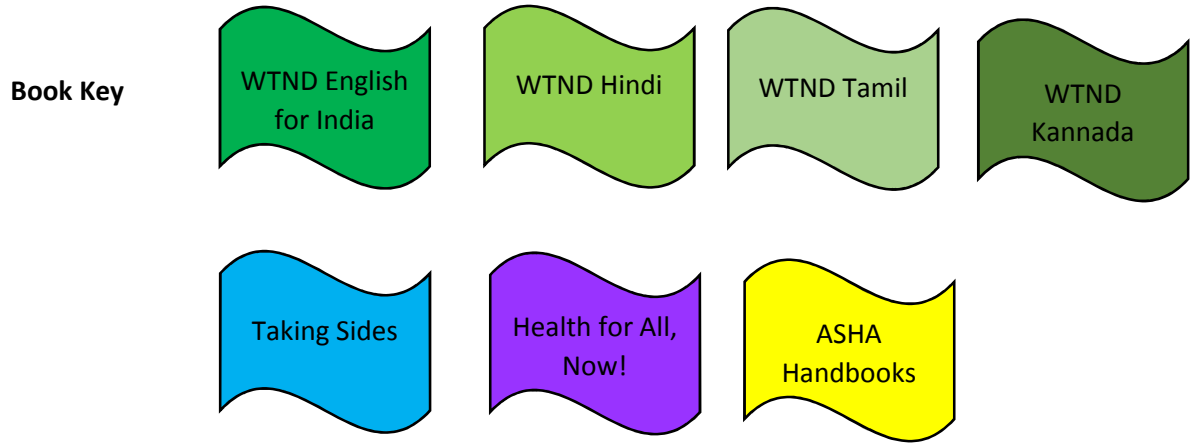


Figure 7: Social words/arenas map of *Where There Is No Doctor* (WTND) in Hindi, Tamil, Kannada and English for use in India

To illustrate the multiple social worlds that interact on and around *Where There Is No Doctor* with differing – and uneven – interpretations of the work that it does, and to bring implicated actors into view, I constructed a series of social worlds/arenas maps, focused on *Where There Is No Doctor* for use in India (as represented by the subsample of language translations I studied: English, Hindi, Tamil, Kannada) as an arena.[20] The map shown in Figure 7 (above) places *Where There Is No Doctor* as a physical book and a traveling package of ideas at the center as an arena and demonstrates the overlaps of social worlds across and around it, as

[20] The exercise was a useful reminder of the non-human actants that are not included in this analysis. There are two particularly notable books that are related to the travels of *Where There Is No Doctor*, but whose authors I did not interview (although I did reach out numerous times to the latter author). The first is *Where There Is No Psychiatrist: A Mental Health Care Manual* by Vikram Patel (2003). This was written in part in response to the lack of mental health material in *Where There Is No Doctor* and the need for that kind of content. When Patel wrote to Hesperian for an endorsement for the book, the editors there felt that his style of writing was not sufficiently accessible or Freirean in its pedagogy and felt they could not provide an active endorsement. David Werner, who runs a separate nonprofit called HealthWrights, did endorse the book. It is fairly widely used in India, and to some extent beyond India. This is part of a large category of books using the 'Where There Is No ___' naming convention, which have a range of relationships to *Where There Is No Doctor* and Hesperian. The second is *Health and Healing: A Manual of Primary Care* by Shyam Ashtekar (2002). I was given an electronic introduction to Ashtekar, but he did not write back when I followed up. At least one participant described this book as inspired in part by wanting to write a *Where There Is No Doctor*-style book specifically for India. These books do not appear on this version of the map, although both would fit in the NGO section based on publication.

well as the organizations and specific publications that this project encompasses. Overlapping across and within this arena are five social words, denoted by dotted lines (clockwise from top left): government community health programs, non-governmental organizations working on community health, academic health training and research centers, health activists, and publishers. Specific organizations that are represented in my data are shown in rectangles. They are representative of the range of efforts included within the country, but do not include international and multilateral funders that have shaped these social worlds from outside the country (such as the World Bank, USAID, or the Gates Foundation), as *Where There Is No Doctor* has not traveled with or through those types of bodies. I locate books on the map as non-human actants with colored flags (see book key below the general map key), located based on publication: translations of *Where There Is No Doctor* are shown at the intersection of multiple social worlds, while related books are depicted closer to the periphery. Years of publication are included on the flags, and all editions published since 2000 are still in print and available. The map reflects both the English for India book and its relationships to the social words and arenas of language translations of *Where There Is No Doctor* and related texts within India that are included in this dissertation.

I have included two groups on the map as implicated actors, represented in navy blue italic text. First, the more specific group is community health worker (CHW) users of *Where There Is No Doctor*: this is the key audience through which the book is distributed, read and used, and they are constructed within the arena. This group is important to take into account because these are the people at the imagined centers of distribution and use of the book. When editors and translators adapt (mutable) material, these are the people editors imagine picking up the book, sharing it, and using it (making it mobile). The second, more general group of

implicated actors are community members with limited access to resources for good health. This group is constructed both within and beyond the arena represented by *Where There Is No Doctor*, and their construction is key to the work of the government, NGO, and health activist groups as recipients of the efforts of those bodies. They are constructed by academics and publishers, but as downstream beneficiaries, rather than as potential students and readers. The circle which represents them is much broader than *Where There Is No Doctor* and overlaps all of the social worlds depicted in the map because each of those social worlds both constructs and is in many ways constructed by the ongoing existence of a large group of people with limited access to resources. Subgroups define themselves, and are in turn defined by government, NGO, academic, activist, and socially minded publishers as the urban and rural poor, tribal communities, members of untouchable, *Dalit*, or scheduled castes, and as those without land sovereignty or capital resources.

This map represents my analysis of *Where There Is No Doctor* as a NHASA and shows some of the ways in which the books – including English for India, language translations, and related texts – travel. The mutability of the text is demonstrated through the many iterations shown here, including the English and Hindi *Where There Is No Doctor* editions near the center of the map, and the Kannada and three different eras of Tamil translations slightly further out. This relatively central location was intentional, as each of these other languages was translated at least in part from the English for India edition, as were other Indian language editions not included in this study. However, it never becomes an obligatory passage point, and does not overlap with the full arena of *Where There Is No Doctor* in India. Mutability is further explored through the relatives of the book included here – books that include some direct material or direct inspiration from *Where There Is No Doctor* – such as the ASHA handbooks produced by

the government, or *Taking Sides* and *Health For All, Now!* produced by health activists (more on these other texts below). These are placed outside of the central arena but in overlapping social worlds to demonstrate both the distances they have traveled and the relationships they represent. The mobility of the text is also demonstrated, as it travels with and across a wide variety of social worlds, from government programs on the upper left side of the map to non-profits on the middle left, from publishers on the upper right to health activists on the lower right, and at the edge of the academy, at the bottom left of the map.

The English for India edition of *Where There Is No Doctor* – the main form in which the book enters and travels around India – is adapted and distributed by VHAI. VHAI started out as a voluntary group (the 'v' stands for voluntary), moved into the NGO arena as that concept was being developed, became well-known for their work in the publishing arena with the success of *Where There Is No Doctor*, and has moved more and more into the government arena in recent decades. At the time of data collection, VHAI had sold its press, donated its health resource library, and spends limited energy on publications, sitting mostly at the intersection of NGO and government work. The current edition of the English for India edition both emerges from and reconfigures this overlap of government, NGO, and publishing worlds. VHAI has attempted to control regional language translations of the book, with limited success. They have successfully seeded a number of translations with state affiliate offices, but many other translations are taken up by other groups. This points to a variety of passage points rather than the creation of one obligatory passage point, as the book travels through both institutionalized and informal non-profit, government, academic, activist and publishing networks that take up the book and use it in different ways.

There are ways in which all of the social worlds represented in the map intersect and inform one another, but representing them in this visual form, which emphasizes key distinctions as well as overlaps, provides important leverage for tracing the travels of this book and analyzing the ways it both emerges from and reconfigures these relationships. All of the organizations depicted on the map have ongoing relationships through which they have influenced, funded, and worked with one another. Individual participants exist across many of these spaces over the course of careers and lives. For example, the government and activist social world overlap in key ways: the name ASHA (which stands for accredited social health activist) specifically designates grassroots government workers as health activists, both recognizing the history of community health workers and frustrating those who see the ASHA program as distinctly non-activist. Participants in the health activist arena focus much of their work on advocating for changes in government services and policy at local, national, and international levels. In addition, many participants across these worlds, but most notably in the NGO arena, helped to develop and support the ASHA program: editing the handbooks, mentoring ASHAs, and running programs that inspired the national renewal of a decentralized community health volunteer program as ASHAs. This intersecting work, which will be traced further below, led to the adaptation of material from *Where There Is No Doctor* in the manuals created to train and support ASHA workers, reflecting the way that different actors interact with, understand and use *Where There Is No Doctor* in different ways depending on their interests and needs. To further explore these dynamics, I turn to boundary object theory as a second key theoretical intervention and tool.

Books as boundary objects

The second intervention on ANT that I take up is to argue that *Where There Is No Doctor* is a non-human actant that has been constructed as and acts as a boundary object (BO). Star's development of the concept of a boundary object begins with a critique of Latour and ANT. She argues that ANT points to the creation of one obligatory passage point in scientific endeavors; in contrast, she takes what she calls an ecological model, arguing that there are always already many passage points in any field, with various actors doing work to position and maintain each in relation to the others. Here, I apply Star's arguments on boundary objects to *Where There Is No Doctor* and the larger arena of community health in India in which it travels, and which its travels shaped.

Star and Griesemer (1989) articulate the concept of BOs in an analysis of the development and early work of the Museum of Vertebrate Zoology at the University of California, Berkeley. They start by noting that scientific work, writ large, is extraordinarily heterogenous, but requires cooperation. People with very different interests and understandings of the world, including scientists within the same sub-field, must work together to produce new knowledge. Building on this insight, Star and Griesemer argue that in scientific work, consensus is not necessary, but meanings must be reconciled. Scientists do not usually agree on many aspects of their field, but they must reconcile the meanings they produce from experiments when they are shared with and built on by others.

Star and Griesemer define boundary objects as objects (for example, in their case, the museum itself, but also the state of California and maps of it, the bodies of trapped animals, etc.) that inhabit intersecting social worlds, "which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common

identity across sites" (1989:393). They go on to describe BOs as "concrete and abstract, specific and general, conventionalized and customized" and heterogenous (1989:408). For Star and Griesemer, it is important that BOs do particular kinds of work. Specifically, they satisfy conflict by meaning different things to different people and allowing different groups of people to work together without consensus. Not only do BO's do this kind of work, but they are created through it: people make boundary objects. Specifically, Star (2010:615) argues that BOs are created when residual categories are produced by standardization (for example, standardization of climate change data). Finally, in her update to the theory of BOs, Star emphasizes that the concept is most useful at an organizational and specific level.

To engage this theoretical tool, I apply each of the qualities of BOs to *Where There Is No Doctor* and the worlds in which it works and is constructed as a BO. *Where There Is No Doctor* is part of a larger arena of community health that is both heterogenous and requires cooperation to provide the resources for good health and access to health care for as many people as possible. For example, practitioners must take collective action to cover open wells, prescribe medicines, deliver a baby – but they do not need to agree on why that action is important to take. There is also no need for complete consensus on what kinds of actions should be taken: different people can work in different ways (one vaccinating children, another running a school lunch program) and still see *Where There Is No Doctor* as advancing 'health' in some way. Within community health, I argue that *Where There Is No Doctor* acts as a boundary object. It is both plastic and robust: it is robust in that it is seen as demystifying medicine by all the translators, but its political nature is contested and viewed in a variety of ways. Its robust nature is furthered by its plasticity: the political content can be edited out or adapted without the directions for providing health care, so that *Where There Is No Doctor* continues to travel and be taken up in a variety of

ways, recognized as the same book (or pieces of that book), but plastic and mutable as it is adapted and excerpted.[21]

Where There Is No Doctor also possesses the boundary object properties of being "concrete and abstract, specific and general, conventionalized and customized" and heterogenous (Star and Griesemer 1989:408). It is viewed as both a literal, tangible book as well as a more abstract set of ideas that travel together but can also be taken separately. It is a book about specific things you can do for health (and exists as a specific object to people, with meanings attached to their use of it in relation to larger ideas about health) but is also a more general community organizing tool that reflects much broader concepts (and exists across those experiences of individuals as an object). It is conventionalized in that it carries and reifies standards (for dosing, treatments, etc.) and customized in that it includes an invitation to change which is taken up again and again. Finally, it is heterogenous in that it includes sometimes conflicting points of view within the pages. *Where There Is No Doctor* means different things (especially along a spectrum of apolitical to always already political) to different people and facilitates work across a range of interests in community health. As a result, the book is not inherently a boundary object but becomes one through the ways that people use it. Here, it is helpful to note Clarke's intervention on ANT from symbolic interactionism – the meaning people attach to non-human actants matters. The boundary object is not just the physical book *per se*, but also what it comes to represent.

Adapted books, which include some content from *Where There Is No Doctor*, have the potential to become new boundary objects at different intersections of social worlds and arenas. Specifically, when translators, adapters, and users try to standardize *Where There Is No Doctor*

[21] See chapter 3 for an exploration of this combination of plasticity and robustness on the level of the content within the book.

to work together using it, some of the ideas do not fit in the adaptation, and that contributes to the production of new objects. In addition, I argue that these other books inspired by and using materials from *Where There Is No Doctor* count as part of the work across difference that the book does as a BO. Just as the museum allows trappers and university administrators who never cross paths, and rarely set foot in the museum, to work together, materials adapted from *Where There Is No Doctor* help to trace the ways in which governments, NGOs, publishers, health activists, and academics work together on community health projects. Relatives of *Where There Is No Doctor* stitch these arenas together, connecting government and NGO workers who use different texts, including both full-length and adapted content from the book. Community health in India is a large arena, but the travels of this book circumscribe a smaller arena within that, and within which BO analysis can track the prismatic travels of this mutable mobile.

Based on the analytical tools described above, I take *Where There Is No Doctor* as a non-human actant that becomes constructed as a boundary object by those working with it within the arena of community health in India. In making this argument, several aspects of how *Where There Is No Doctor* acts as a boundary object become clear, each of which corresponds to key interventions that Star (Star and Griesemer 1989) and Clarke (Clarke et al. 2017) make on ANT and its concept of immutable mobiles. First, it is not the stabilization of the arena of community health that is being produced here: programs come and go, books are changed, rewritten, and replaced. For example, the concept of the community health worker (CHW) appears stabilized at various points in time but shifts between constructions as a man and then later a woman, as a volunteer or a worker paid for specific activities or a salaried employee, as affiliated with NGOs or with the government. Instead, our attention is drawn to the work this instability achieves: how, for example, CHWs are constructed and reconstructed by various other actors according to their

interests over time, and what effect this has on both the CHWs as implicated actors, and on the people they are supposed to be serving. Second, there are many passage points created in the field: government programs, activist groups, and others situate themselves as obligatory at different times and in different ways. Third, both actors and actants are constructed by one another, and it is important to note the power relations inherent in these interpretations, rather than to lay them all on the same analytic level.

The second findings section, below, takes these theoretical tools and uses them to follow the travels of *Where There Is No Doctor* and related texts and to argue that the outcomes of this mutable mobility reflect both where participants think that health comes from, and the kinds of knowledges they believe are important for responding to that need. I use *Where There Is No Doctor* and books it has inspired to trace these dynamics, and to argue that the newer books become developed as boundary objects in their own right, as debates about community health workers, the right to health, and the capacity of people and governments to provide both the conditions for good health and the care needed to maintain health and fight illness continue to develop and change.

Empirical findings: Expressing milk and excising politics

The flexibility of *Where There Is No Doctor* – and the ways it travels as both a physical book with an open copyright and as a package of ideas – allows actors from different social worlds to take pieces of the book and the ideas it carries, and use them for health projects that construct health as a technical and/or political problem to be solved. The travels of *Where There Is No Doctor* include not only the book with that title, but the ways in which parts of it have been

excerpted and adapted, and have traveled into other books. In traveling, the book re/constitutes social worlds that it is developed in and travels with. Drawing on NHASA and BO theoretical tools, and the symbolic interactionist framework from which both are developed, I analyze the social worlds through and across which the book travels, the ways that actors positioned through and across these worlds interact with the book, and the meanings they make in those interactions. Specifically, based on people's actions towards *Where There Is No Doctor*, including ways they adapt, excerpt, and use the book, I analyze how different groups and social movements position themselves vis-a-vis one other, and in relation to larger debates about where health comes from and contentious discourses around access to health care, government responsibility, the right to health, and the kinds of knowledges needed for health based on those perceptions.

In many ways, this section uses the question "where does health come from?" as a point of analytic entrée. Does it come from the 'community,' from a group of people and the knowledge they already have or can learn directly? Does it come from government programs, from water and sanitation to hospital provision? And if it comes from both, in what combination? Based on the answers to these questions, different kinds of knowledges are needed to promote health and to counter illness. *Where There Is No Doctor* includes many kinds of knowledges,[22] from instructions on herbal home remedies to western medical formularies, that can be taken together, but can also be broken up and taken separately. The ways these knowledges are taken up and defined as political and/or technical can be seen both in the use of *Where There Is No Doctor* and in adaptations of content in related books. This section therefore analyzes the technical-political tension as Sathyamala described it at the outset of this chapter: the difference

[22] See chapter 3 for an in-depth analysis of the kinds of health knowledges included and constructed in *Where There Is No Doctor*.

between a technical tool for health, like a stethoscope, and a political analysis of the larger forces the impact health and illness.

I start by examining the ASHA handbooks, which include adapted material from the book, as an example of adapting technical knowledge from *Where There Is No Doctor*, and that accompany the bureaucratization of community health work and the depoliticization of health. Next, I focus on political knowledge for health, and books that relate to *Where There Is No Doctor* as political. When the book is seen as insufficiently political, *Taking Sides* is produced. *Health For All, Now!*, on the other hand, adapts political material from *Where There Is No Doctor*, as part of efforts to conduct a consciously political economy of health. These related texts are an excellent example of the importance of looking at non-stabilization of networks, focusing instead on how different needs are met in different ways (see Figure 8 below for images of book covers). Finally, I turn back to the travels of *Where There Is No Doctor* itself, and the positions and outcomes associated with the book as a whole form. One version of these travels maintains the book as an explicitly political project, carrying important ideas, but with limited uptake. A second takes it as a technical tool, where it is used more widely, but on a smaller scale than the ASHA handbooks. These sites provide important insight into the value of examining multiple passage points, as adaptations continue to proliferate from and through a variety of sites, but all with an eye towards the larger project of providing conditions for good health for those without access to the resources necessary for health.

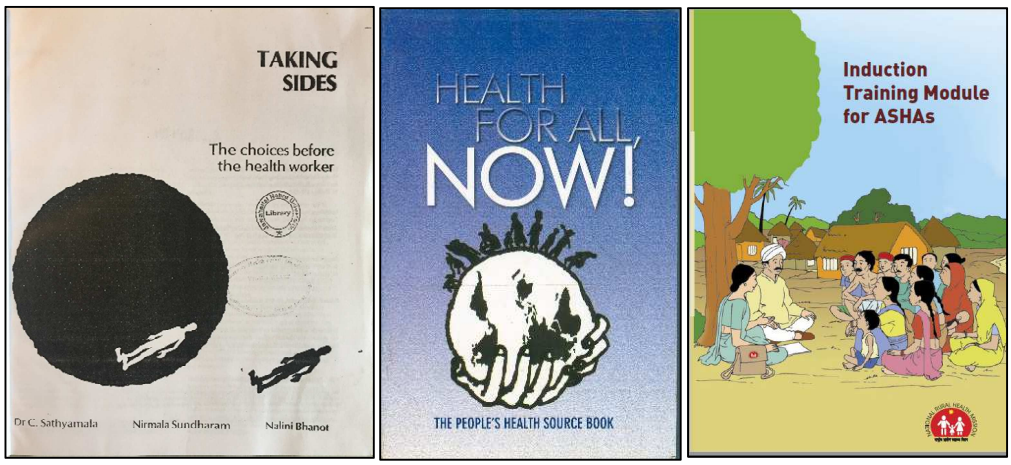


Figure 8: (left to right) *Taking Sides, Health for All, Now!, Induction Training Module for ASHAs*

Technical knowledge for health: Hope handbooks

The ASHA[23] handbooks were developed as training and resource materials for female community health workers, at first serving rural village settings, and now urban communities as the program expands (NHM 2016a). ASHAs are government workers but are not salaried – they are paid based on completion of activities, like bringing a pregnant woman who might otherwise have delivered at home to the hospital for birth. The handbooks include a variety of materials on providing basic health care and prevention services, and have both content and images adapted from *Where There Is No Doctor* and *Where Women Have No Doctor*. While ASHA stands for 'accredited social health activist,' participants in this study saw the ASHA workers as grassroots government workers providing basic services, not as political advocates around the larger social determinants of health. From this position, health is not inherently political but is a technical problem to be solved, a matter of increasing services until everyone has access to them, and ensuring those services are technically adequate to reduce sickness and disease. The ASHAs are

[23] '*Asha*' translates to 'hope' in Hindi.

an important part of this project. In this frame, *Where There Is No Doctor* appears as a non-political book, and government programs have successfully taken over the work of community health to a significant degree. This view is optimistic about the role and abilities of government, and eventual universal access to health care – as distinct from a more broadly construed right to health that would include changes in broader social and structural determinants. As Dr. Prabhat[24] describes:

> In India there is not a rights-based approach at all. And many times when you speak of right based approach it becomes a synonym of disagreement or dissent... So that is why... health people are no longer talking of the right based approach but universalization of access. Universal health care, that is the thing which is happening now... Everybody should have access to their health care needs.

Dr. Prabhat was trained as a doctor, and works closely with both non-profits and government agencies. He was one of the main contributors to the eighth and most recent edition of the English for India *Where There Is No Doctor*, which was completed in 2010, and last printed in 2014. He thinks the organization might update the book one more time but sees it mostly as a symbol of a past era. He was also closely involved with the development of the ASHA program, which he deems overall a success. Since the government is now training community health workers, he muses that perhaps NGOs can focus on new challenges, such as addressing the rise of chronic disease in India. Similarly, since the ASHA program has its own handbooks, *Where There Is No Doctor* on its own is no longer necessary going forward.

This reflects Sathyamala's view of the book as a stethoscope, something that can have the politics excised, or whose technical content can be excised and repacked for non-political means. The ASHA Handbooks include content that is directly adapted from *Where There Is No Doctor*: see for example the directly adapted images in the middle row of Figure 9 below. The images

[24] A pseudonym.

show how to express breast milk to feed a baby from a spoon or bottle. Although not quite an image of a stethoscope, these illustrations can be seen as technical instructions, not focused on the political and social commentary on breastfeeding that is provided elsewhere in the book.

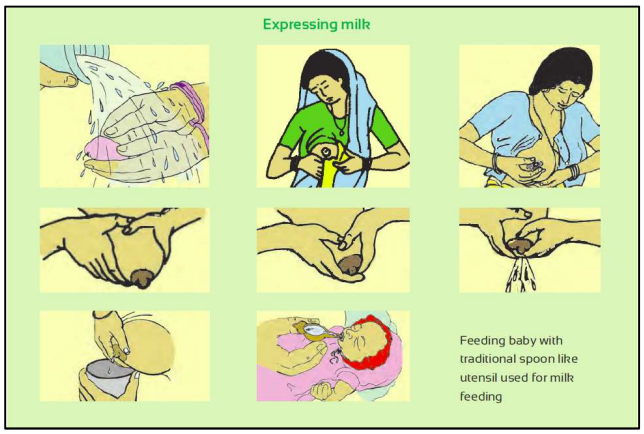


Figure 9: *ASHA Module 6: Skills that Save Lives*, page 55 (middle row of images originally printed in *Where There Is No Doctor*, page 277)

The placement of the ASHA handbooks within the social worlds/arenas map (Figure 7 above) above reflects this depoliticized stance that health is more of a technical problem to be solved. The handbooks sit squarely in the government community health programs social world. At the same time, treating the handbooks as a non-human actant in a situational analysis frame underscores their role in the production and distribution of health information, and in its travels. There are 900,000 ASHAs, and presumably as many copies of these materials across the country. A piece of *Where There Is No Doctor*, repackaged as part of a different but related project, travels with those handbooks, and the women who read and use them. The construction of *Where There Is No Doctor* as a boundary object here is important – editors saw the material inside the book as technical, and as serving their interests and needs. They took some of that material, used it in their own handbooks, and distributed those, traveling as a mutable mobile. It serves different

needs for different users. The co-construction of actors and actants is clear: government editors creating handbooks, which are used to train, define, and support the work of ASHAs. The ASHAs are both implicated actors themselves, constructed by others as government workers, as potential health activists, as care providers, and are part of the construction of the imagined rural villagers and urban poor who they serve.

Political knowledge: Health for All, Now!

Opposed to but always in conversation with the idea of health as a technical problem to be solved (or simply a matter of access) is the view of health as always already political. Sathyamala, who led the first English for India adaptation of *Where There Is No Doctor,* sees that text as being primarily used as a tool, with limited political content and effectiveness – so little, in fact, that it can be easily removed. Spurred on in part by this observation, she co-wrote another book, *Taking Sides*, to highlight the political economy of health, in such a way that the politics cannot be excised. Beginning with its very title, *Taking Sides* attempts to confront directly the community health worker or other clinician, as well as those designing health programs. A decade and a half after the publication of *Taking Sides*, Sathyamala worked with a group of health activists on the Indian delegation to the People's Health Assembly, and coordinated the finalization of the Indian People's Health Charter. The Assembly gave birth to the People's Health Movement (PHM), and the charters from each country were combined to help develop a global document. Out of these organizing and writing processes, a series of pamphlets were developed for health activists in India, providing the kind of political economy of health that *Taking Sides* foregrounds. Those pamphlets were eventually consolidated into a single book, titled *Health for All, Now!* (Jan Swasthya Abhiyan 2004) in reference to the work of

PHM and in reaction to the failure to achieve the Alma Ata declaration of 'health for all by the year 2000.'

From the perspective that health is always already political, *Where There Is No Doctor* is not explicitly political enough, and while the government should be pressed to provide services, it is important to acknowledge the possibility that government cannot or will not provide sufficient services to support health for all. Dr. Thelma Narayan is a co-founder of both academic and non-profit community health programs and has advised the NRHM and served as a mentor to ASHAs. The non-profit she currently runs, SOCHARA, distributes *Health for All, Now!* and is an active member of JSA, the Indian national chapter of PHM as well as the MFC network. She describes the perspective that non-governmental community health worker programs and government both should and can provide good services, and that the government can be pressured to provide more and better services this way:

> It is a point of tension; it's a critical, it's a good tension. There are two different needs. One, there is a very pragmatic need of, say a child [who] is having diarrhea or is underweight; they need something here [now]. You can't wait till your rights get realized, [and] the community health workers can play a role in doing that. There's been one group who are the rights-based purists, who only want to monitor the government health system and to ensure that social accountability is brought to the fore. [But] those of us who worked in rural areas, I feel it's inhumane to do that. If you have the knowledge you should be using it. And it is government's right and responsibility to train people. We as a country and all countries need to invest more in health, so that there are stronger public health systems. But unfortunately, despite all our advocacy since the past 15-16 years, it hasn't really actualized. It has improved a little bit; we have the National Rural Health Mission. Infant mortality rates are trending down. But child nutrition hasn't improved. So we are not addressing the determinants of health that many of us have been trying to bring to the fore. I think you need to have both. And those who are in health have to see that when people are ill they do need to have access to something.

This kind of response is grounded in her experience as a physician, and as an advocate and a trainer. It reflects both her commitment to providing direct services, and to working with and pushing the government to play an important role in that provision. While she sees both the

progress the government has made, and the role advocacy has played in making those changes, she also notes the ways in which the public health system continues to remain structurally unable to change key health outcomes. In her work, *Where There Is No Doctor* serves as a symbol of community health and the kind of self-determination that is needed alongside pushing governments to do better and more structurally significant work. It is both a tool for health, and a political object.

Health for All, Now!, like the ASHA handbooks, uses some images and ideas taken directly from *Where There Is No Doctor*, as well as original cartoons inspired by the book's style of modeling interactive learning. Figure 10, for example, focuses on an analysis of the forces in society that lead to poor health outcomes for women, framing health as inherently political, in contrast to the instructions for expressing breast milk. It reflects the opposite tendency from what is demonstrated in the technical adaptation: an explicitly political use of material.

Figure 10: *Health for All, Now!* page 207 (image originally printed in *Where Women Have No Doctor*, page 6)

Taking Sides and *Health for All, Now!* sit in the health activist social world in Figure 7, with some overlaps in NGO worlds.[25] They address the government as a body to be lobbied but are not by or for government workers. Rather, they suggest a range of shifts in society, from the radical redistribution of resources to smaller changes in social relations that might change the social and structural determinants of health. If we consider *Where There Is No Doctor* as a package of ideas that can be taken apart and used separately or together, we can see the varying ways in which that material has been incorporated into texts such as ASHA handbooks and *Health for All, Now!* as mirroring the ability for individuals such as Dr. Narayan to both work with ASHA trainers as well as advocate for more government accountability for health. Here, rather than *Where There Is No Doctor* bringing together disparate social worlds and stabilizing those networks, its ongoing adaptation into new texts allows the ideas within the book to travel. The flexibility of *Where There Is No Doctor* lends itself to adaptation for a particular audience in ways that leave others out: often those others then create their own adaptation to meet their own needs. In this way, the book functions as a boundary object, meaning different things to different people while allowing them to work together across considerable distance and heterogeneity of perspectives on health.

Where There Is No Doctor *as political: this book believes in human rights*

For people like Dr. Narayan, *Where There Is No Doctor* still has salience, and is used as a whole book, and a political book, supplemented by more explicitly political analysis like *Health for All, Now! Where There Is No Doctor* itself is still being translated, adapted and used,

[25] *Taking Sides* was written without any funding: the authors received some from non-profits for publication and distribution only.

including by those who see the book as always already political, and re-affirm that perception through their work with the text. Dr. Gopal Dabade explains the choice he and his wife made to include the story of a doctor who was arrested in 2007 for providing health care to Maoist guerilla rebels (Vyawahare 2012) on the back of the third edition of the Kannada translation (see Figure 11 below):

> The last page of this book has a photograph of Binayak Sen. He was in jail at that time. You see for us health was not just medicines, it was not just health education, hygiene. It was more than that. It was trying to look at ways of social determining in health. Like, for example, the multinational companies, how the health policies, how the drug policies, affect all people. How certain policies are just thrust upon India. Health had become much bigger than just saying keep yourself clean, or wash your face, wash your hands… I don't need to write and say that this book believes and we believe in human rights. We are talking about a person who the state has oppressed, has put behind bars. So people ask me, this is just a health guide book, why do you write about Binayak Sen? And I tell them, unless you release Binayak Sen people in this country can never get health.

With this back cover, the Dabades demonstrate visually that the book is political. Dr. Dabade describes his position: health care matters, but the social determinants of health, including the post-colonial manipulations of multinational companies, foundations, and governments matters just as much, if not more. While I was collecting data in Spring 2015, another doctor was arrested – and released, partly due to health social movement pressure – on the same charges that Dr. Sen faced, providing health care to Maoist rebels. These kinds of cases demonstrate clearly the ways in which providing health to marginalized communities requires confronting the structure and nature of the state, and the points at which provision of health services come up directly against larger social determinants of health. When you can be arrested and imprisoned for providing care to people so poor they are willing to take up arms against the state, it lays bare the relationship between health and politics. Despite the book's association with the idea of a community health worker providing basic services, and the expansion of access to health care, to

Gopal, the book is about health as a human right. Talking about a doctor the government has arrested for providing health care to the poor and marginalized demonstrates this by forcing readers to consider these relationships between power and health, and the ways they are structured by the state.

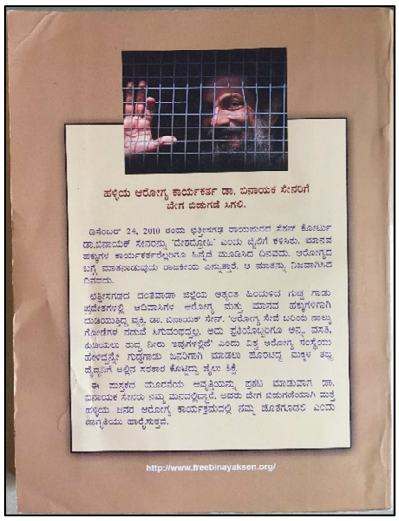


Figure 11: Back cover of Kannada translation of *Where There Is No Doctor*, featuring Dr. Binayak Sen

Gopal's wife, Sharada Dabade, a south Indian journalist who has been involved in community organizing around health, land rights, and other topics, describes her and Gopal's work with a small, rural community-based organization, and the context in which they understand their efforts:

> There is no more talk on health education. Either we talk on rights-based, [or] we say that it is the government's work to do it. Now, we are not responsible to give education to people. So most of the organizations either work with the government, or work on rights-based issues. No one is interested in training people for health.

Sharada explains that their current work focuses on either using a right to health framework to encourage the villagers their organization serves to work to change the social and structural determinants of health or to hold the government accountable for access to services. She distinguishes this from past eras, when many groups, including their own, focused on training people to provide health services to one another and to their communities. The Kannada edition she translated with her husband Gopal is now in its third printing: while the first two editions sold quickly, this version, which includes updated content on advocacy, is growing moldy on a high shelf in her house. Individual copies continue to sell at a slow rate, but she says, with a light laugh, "it is being used at home by people, it is not being used as a training manual now, that is the sad part of the story today." Her husband sees a similar trend in their work together, and while he is eager to take a copy down and share the book when someone is interested, he notes a similar decline in both community health training and demand for the book: they attribute this to a decline in community-run health programs and a rise in the need to advocate as government programs have grown.

The Dabades see a shift from community health work towards right to health organizing, although they themselves are involved with both. Accordingly, their translation sits at the intersection of health activism and NGO social worlds in the map shown in Figure 7, exemplifying a politically minded non-profit community health endeavor. It does not directly overlap with the VHAI English for India edition, although it was translated from that text. The Dabades' Kannada edition, with its extended section on advocacy and expressly political back cover, points to the construction of *Where There Is No Doctor* as a boundary object, both robust and plastic, even as its use as a full book declines.

Where There Is No Doctor *as technical: a weak man's effort to make an issue political*

Other groups focused on community-level solutions for communities that have been historically marginalized and live in areas relatively untouched by India's booming technology economy continue to use the book as a technical tool. Dr. Bobby Joseph runs a community health worker training program and serves as head of the Department of Community Health at a Catholic teaching hospital in Bangalore, the capital of Karnataka. The training is part of the work of a rural clinic established outside the city, which also serves as a training site for community medicine students. They use both the Indian English and Kannada editions of *Where There Is No Doctor* as training manuals, and he describes the clinic and training program's work:

> Our clinic is [focused on] more basic community health work, grassroot level work. What you can do to understand problems, what you can do to provide solutions to small communities. So it hasn't been a rights-based approach. We do tell them what are government services, and what their community can do to access those services. It's basically more of building up their capacity to deal with issues at the community [level].

While the training maintained a relatively consistent focus over the last twenty years since Dr. Joseph joined the department, he spoke of two shifts. The first is an epidemiological shift, in line with global trends: in the past, they focused more on "communicable diseases, infections, immunization programs" but now he says they spend more time during the training on "issues like diabetes, hypertension, care of the elderly." Second, he reflects that there has been an increase in a group approach to care, "from a community health worker providing care to the individuals, to the community health worker providing care to groups of people," whether that is children or mothers gathered at a nursery, or patients gathered around a similar health issue. Both of these shifts are, in their own ways, within a community health worker model – a shift in topic, and perhaps in scope of community education settings, but with the focus still on taking time to

train people directly on understanding and meeting individual and community health needs. Over time, the training program also developed new teaching modules, adapting content from *Where There Is No Doctor* and other sources.

The Dabades and Dr. Joseph each describe different frameworks for promoting community health in the context of ongoing health inequities and limited resources with which to address them: on the one hand, training people to provide services, and on the other, training them to advocate. These positions are often described as opposed, although in practice many people and programs engage with both. Dr. Joseph gives each community health worker an English-for-India adaptation of *Where There Is No Doctor* at the beginning of the course, and while it is not used as a text book, participants are encouraged to read it, and to keep it for reference during their work. Two years ago, a digital copy of the Dabades' Kannada edition was found by Dr. Joseph and his staff on the Hesperian website, and printed out for two Kannada-speaking community health workers. The two women had both become involved with the clinic as volunteers and were hired to work in their communities after the training. Thus through the discovery of a digital copy of the Kannada edition, a teaching hospital that runs a traditional community health worker program is bringing the book directly to the Kannada-speaking community health workers the Dabades had in mind when they first sat down to translate the text.

Others who serve the rural poor use the book as a tool based on a political analysis. Dr. Yogesh Jain runs a community health program that serves an extremely poor, rural, tribal population in Chhattisgarh. The organization, started by a group of dedicated health care professionals who wanted to serve remote communities, used *Where There Is No Doctor* and its

companion books[26] as foundational texts in the program's conception and continue to use them in trainings. Dr. Jain describes his understanding of the tension between spending time training people to provide health services and training them to advocate:

> Advocacy is a weak man's effort to make an issue political. I have reservations about, when you ask [for a] rights based thing, whom are you asking rights from. From the State, [with] the assumption [that the] state is the custodian of the people's concern. [But] the state itself is denying its responsibilities in providing people basic services, of which health is one. So if the state is not functioning well, whom do you demand from?

Dr. Jain argues that making advocacy demands of a state that is not fulfilling its duty to provide basic health services doesn't make sense. The population he serves, which is very rural and mostly tribal, has been historically marginalized and under-served by both the state and national governments. His solution has been to develop what is in some ways a very traditional community-based health program, with a small hospital that provides surgery and other advanced care, fed by three primary health centers, and supported by a large network of community health workers who work in villages further away from the hospital and clinics. He is explicitly using *Where There Is No Doctor* and its companion books as a response to a situation in which he sees little to no attention being paid by the state to either social determinants of health or the immediate health needs of the people. Here, the book remains both an important tool and a symbol of self-sufficiency in an area where the government is not providing services.

However, Dr. Jain is not connecting the book to larger political claims in the way that Dr. Dabade attempted to do by including the incarcerated Dr. Sen on the back cover. Rather, to Dr. Jain, the book is current and relevant as a tool in an explicit turn away from making claims about the right to health on a governmental level, and towards providing services to communities who

[26] Including *Helping Health Workers Learn,* a companion text which includes more explicitly political content.

would otherwise not receive them. While he recognizes there might be an unintended cost in meeting such needs, he argues for a pragmatic position:

> The other criticism that the rights-based people say is that once you provide service then you are suppressing people's ability to struggle and fight. [Some] Indian leftist believe that … until revolution comes let people suffer so that they feel inclined to struggle. I think this is not the right way. I would demand rights for a woman to get blood when she is in need of blood, if she is bleeding after child birth, but I would also support other ways of controlling bleeding, by training community health workers to be able to look after these things.

In this way, Dr. Jain is using the book in the way it was originally designed: to support health care workers without access to formal systems. Paradoxically, Dr. Jain's non-governmental program was one of a handful that inspired the newly formed Chhattisgarh state government to create the successful Mitanin program, which in turn served as a model for the national ASHA cohort. JSS serves its immediate community, the Mitanin program sill functions as the state-level community health worker program, and the ASHA model has been scaled up across the rest of the country. This cascading effect towards the creation of a national community health worker program resulted in a national program inspired in part by the response of Dr. Jain and his colleagues to what they see as a government that is not providing adequate health services.

Reflecting this paradoxical and complicated relationship between government and non-profit solutions to health inequities, the books that Dr. Jain use sit squarely at the intersection of government, NGO, and publishing social worlds on the social worlds/arenas map (Figure 7). However, this location does not reflect stabilization, drawing on Clarke and Star's insights: Dr. Jain developed a program where the government does not reach that helped to shape the next iteration of a state and then national government program on a massive scale. There is no single obligatory passage point that the books pass through, as Latour might look for. Rather, there are

many organizational passage points – VHAI's Delhi office, Hesperian's website, even Gopal and Sharada's small nonprofit – and people who are positioned as such, Dr. Sathyamala among them. Because of the open copyright the book carries, there is never a significant funneling effect, never one person or organization through whom others must pass. Implicated actors such as Clarke suggests – including the end users and the community health workers who serve them – are constructed by doctors, program officers, translators, and public health professionals. But those implicated actors also fundamentally construct the books. Across these complex dynamics is the way in which the books become boundary objects as they are used in highly plastic ways by a wide variety of actors while maintaining a robust identity. They connect the work of village health workers, government bureaucrats, urban doctors, NGO workers, and parents caring for their children. The work of all those people, while heterogenous, is also organized through these traveling texts, connected and illuminated by their journeys.

Conclusions

Caregivers and advocates around the world wrestle with questions of where health comes from, and who is responsible for creating the conditions conducive to good health. What is the role of the government, of communities, of healthcare providers and their patients? What is the role of larger social structures in influencing health? What kind of immediate care is needed, what kind of healthcare structures, and what kind of social, political, and economic worlds? *Where There Is No Doctor* provides a set of potential answers to these questions, focused around the idea that anyone can understand and take action for health. While the use of the book as a full text has declined since the 1990's, the physical contents and ideas it carries – both technical and

political – continue to travel widely. I argue that *Where There Is No Doctor*, as a non-human actant as interpreted by situational analysis, represents different ideas and sets of ideas to different people and functions as a boundary object to people working in community health in India. How research participants view *Where There Is No Doctor* and the ideas it includes reflect where they think health comes from, and the kinds of knowledges they think are helpful for that endeavor. Because of these intersections, tracing the history and travels of *Where There Is No Doctor* in India helps to illuminate the ongoing and contested history of community health programs and the concept of the right to health.

While some participants described a shift from a community health worker focus to a right to health model in organizing, historicizing community health programs before the expansion of government health systems can risk depoliticizing work that was done earlier. Dr. Mira Shiva is a lifelong health activist and professional who contributed to the English-for-India and Hindi adaptations of *Where There Is No Doctor* and *Where Women Have No Doctor*. She describes the history this way:

> Many people imagine that what was being done earlier was only providing services as an alternative to government. But after people's education for health action, it's you fighting against the baby food companies, tobacco companies, pesticides companies, pharmaceutical companies, it was a north-south issue where trade and all was concerned. All this was happening in the 80's and 90's. So not everyone was only giving iron tablets you know. It was not providing medical care in isolation. It was in a certain socio economic political context. And with the understanding that the socio economic political aspects of health are more important than doctors.

As someone active in the field since the 1970's, she feels that historical advocacy efforts in India have been undervalued in the narrative that describes the right to health as a new organizing principle. She points out the connections between service work and international advocacy,

focusing on the fight against trans-national corporations and the ways they have affected health. For her, *Where There Is No Doctor* serves as a symbol of the historical importance of community health work as inherently tied to advocacy. Because she now focuses entirely on advocacy, she sees the book as connected to her past work – when she was involved with both primary health programs and advocacy. She also reflects on the idea that provision of health care alone is important but limited, no matter who provides it – larger social determinants of health will always play an important role. She works with the People's Health Movement team that produced *Health for All, Now!*, and the book reflects the position she describes above: provide iron tablets on the ground, but health for all will never be achieved unless advocates keep fighting big pharma in the courtrooms.

To conduct this analysis, I built on the work of Latour and ANT to bring in non-human actors, focusing on three interventions to update that work: focusing on the destabilization of networks rather than their stabilization; emphasizing the importance of multiple passage points, and of studying the work that it takes to create and maintain various points, rather than one dominant obligatory passage point; and maintaining a power analysis that does not allow the leveling of the analytic field and focuses instead on dynamics of domination and co-construction among actors and actants. While ANT asks how things came to be the way they are – the actors and actants involved, their relationship, how things were stabilized, what obligatory passage points were created – and immutable mobiles investigates how ideas travel without changing, SA and BO ask how things might be otherwise. In a world of enduring health inequities, this is an increasingly urgent question. *Where There Is No Doctor*, in its many forms and relatives, provides one important bundle of answers, reflecting the range of ideas with which people approach the problem of health and illness.

Participants' analyses of the variable role, abilities, and responsiveness of government intersect with their views of health and *Where There Is No Doctor* as political (or not), and inform the degree to which they use the book actively as a training tool and reference manual. Some adapt it as a non-political tool for assessing and providing health: others bring out and add political aspects. Still others use it as it is, a guide designed in a setting with no access to a formal health system. And finally, for many people, the book functions as a symbol of the kind of right to health organizing they are committed to, but rarely take the volume off the shelf. In these travels across the country, and in the context of international dynamics of postcolonial and neoliberal global health development projects, *Where There Is No Doctor* inspires and is taken up in the form of other texts. These related materials reflect the interests of the people who have created them, and travel accordingly: health training handbooks for the 900,000 government community health workers, a set of handbooks on right to health organizing consolidated into a single text, and a political economy of health written with the intention of making it impossible to think about health without thinking about the politics it is entangled in. When the book and its ideas travel, however, they also change. Participants refer to one text, but the American English, Indian English, Hindi, Kannada, Tamil, and other editions each differ – and each edition changes over time, as ideas about how to recognize and treat illness change. The next chapter explores how the book is adapted and translated, reflecting how editors see themselves, the communities they hope will use the book, and the concept of health. In a medically and politically pluralistic landscape, *Where There Is No Doctor* carries and reflects a wide variety of health knowledges, all shared with the hope that the words and pictures on those pages will increase the chances that one more person, one more community, one more region will take action for health.

Chapter 3 – Making locals makes global: changing herbs and illustrations

Introduction

Bangladesh approached us for the Bengali version, though we were doing a Bengali version in India in West Bengal, they wanted it different. Then Sri Lanka came, I helped them in doing that. Nepal came across. Then we did a Tibetan version. The difficulty was, at that point of time India-Pakistan relation were not so good, but Pakistan was very keen to do an Urdu version in Pakistan… One of the international NGOs who was present there had a presence in India as well, so we said, 'ok let's meet up somewhere and let's discuss it over'… We had a detailed discussion and I took them through the process, so they came up with their version. All these South East Asian countries, I was helping them come out with their own version.

– Padam Khanna, editor of Where There Is No Doctor at VHAI, 1979-1995

Where There Is No Doctor is one of the most widely used community health manuals in the world. First written in the 1970s by a group of American volunteers and Mexican community health workers, it spread with health social movements and has been translated into over 80 languages. I argue that these travels, and the ways the book both remains recognizable and is consistently adapted demonstrates the ways in which the localizability of the book makes it a successfully[27] global object. Following Chakrabarty (2000), I *provincialize* or de-center the American English edition, and examine the ways in which the heterogeneity and recognizability of Indian language editions make the text global (used in many locations around the country and the world) by making it local (inviting to users in a specific region). This chapter explores the ways the book changes, the ways it stays the same, how it achieves this agility, and the work this type of agility makes possible in terms of the organization of knowledge. The book is agile because it travels and changes, and because of the way in which it travels *because* it changes.

[27] I use the phrase 'successfully' rather than 'successful' to denote that this is a process and not a static state to be achieved. I will argue below that it is the process of repeated localization that makes the book successfully global.

Where There Is No Doctor travels because people carry it, read it, translate it, use it to teach and to treat others. Specifically, it travels because it changes when those readers, editors, and users add herbal home remedies and re-draw pictures, adding long hair to African figures to make sure they will be identified as women, or changing specific clothing such as *saris*, *dhotis*, and *lungis*. It is these changes, these localizations, so often based on knowledge considered to be 'lay' or non-expert, that make the book a successfully global object. In these travels, the book also remains recognizable and maintains a large portion of the content, as reflected in the table of contents, which remains similar across time, across editions, and across language translations.

I use two empirical arenas – of changing illustrations and herbs across adaptations and translations – to argue that it is the layered localization of *Where There Is No Doctor*, traveling with and in pluralistic contexts, that make it a successfully global object. The localization is layered because it is not achieved in one adaptation. Rather, over time and across locations, editors and translators make their own adjustments, building on, maintaining, and rejecting changes that previous editors have made. This layering – and the ability to layer – are key to the localizing process that creates a global object. First, I argue that the ways illustrations are adapted demonstrates how this flexibility makes the book a successfully global object: its invitation and ability to change, while remaining recognizable, has allowed it to travel across 80 languages and over 200 countries (Hesperian 2013). This is an astounding reach, far beyond the geographic, linguistic, and cultural diversity that most health interventions hope to achieve. The book is meant to be used by individuals and by groups, often gathered around the text, with a community health worker reading the text out loud for the benefit of illiterate neighbors. In this context, the way illustrations are adapted demonstrate both the importance of those illustrations for communicating the core health messages of the book across lines of class, caste, and literacy,

and how the localizability of the knowledges in the text allow it travel. Changing illustrations are a good example of the effort to adapt a book while maintaining its recognizability – they are changed not to change the meaning of the picture, but the representation of the people – to make the idea more recognizable, so someone can literally see themselves in the book. Second, I argue that *Where There Is No Doctor* travels in medically pluralistic India because the book itself is medically pluralistic and includes critiques of herbal and allopathic medicines that are carried with it. In her foundational commentary on situated knowledges, Donna Haraway advocates for a power-sensitive, rather than pluralistic conversation (1988:589). Building on these insights, I leverage postcolonial theory to read medical pluralism as never eliding power dynamics, and as a lens through which to look at multiple health systems and the complex web of interactions that they are part of. Analyzing the adaptations of herbal remedies in the book, I argue that this represents a rare institutionalization of what Sujatha (2007) terms medical lore, a form of medical knowledge that is rarely acknowledged as having value, and that privileges and integrates lay knowledges.

This chapter draws on interviews with editors and translators of English for India, Hindi, Tamil, and Kannada language editions of *Where There Is No Doctor* and related texts, and translations of the table of contents and visual analysis of illustrations and layout across those languages, as well as the American English edition. The chapter begins with an overview of the heterogeneity of India and the medical systems used within it, followed by an overview of the theoretical tools that medical sociology and postcolonial science and technology studies can offer to an exploration of the proliferation and breakdown of lay, expert, local, and global knowledges. Next, I use the empirical arenas of changing illustrations and herbs in the text to argue that the

layers of localization in a medically pluralistic context create the book as a successfully global object.

Background and literature review

In order to use *Where There Is No Doctor*'s travels in India to analyze the book as a successfully global object it is important to underscore both the size and heterogeneity of the country. As one health activist described it, "India is a country where if you travel one hundred kilometers then everything changes… India at the same time lives in several centuries." Differences at regional, state, religious, caste, and socioeconomic levels intersect to create a profound heterogeneity both within India, and across its diaspora. Technologies, languages, and ways of life that are both ancient and cutting-edge often exist side-by-side, in neighboring communities, and within the same home. North Indian languages, including Hindi, are mostly from the Indo-Aryan family descended from ancient Sanskrit, while the major South Indian languages, including Tamil and Kannada, are Dravidian, descended from an ancient precursor to modern Tamil. The North-South divide, while significant, can also mask myriad levels of larger and smaller language, political, cultural, and other categories of relation.

These divides and overlaps are also reflected through the systems of medicine officially recognized in India. Government-recognized medical systems originate in Sanskrit, Ancient Tamil, the Middle East, and Europe. One broadly used term for what might be called 'Biomedicine', 'Western Medicine', or 'Modern Medicine' in India is allopathy.[28] The use of the

[28] The word 'allopathy' was coined by the founder of homeopathy to differentiate his practice from the medicine practiced in Europe at that time (Whorton 2004).

terms ‘modern’ and ‘Western’ are also appropriately descriptive in their own senses within India: allopathy was imported from the west and is one of the more recent additions, coming to dominate formal health training in India under British colonialism by the mid-19th century (Roy 2015). Alongside these formalized systems of medicine, ‘medical lore’ (Sujatha 2007) developed through the use of locally available herbs and household substances to identify, prevent, and treat illness. To theorize this pluralistic setting, and the variety of knowledges produced in and through its practice, I leverage concepts of medical pluralism and medical lore from V. Sujatha, responding to medical sociology literatures focused on the production and contestation of lay and expert knowledges in health. In addition, I draw on Warwick Anderson and others to explore concepts of local and global, building on the work of postcolonial science and technologies studies (STS). The concepts of local and global are often set up as a dichotomy: a postcolonial STS lens analyzes them in the same space and explores ways in which they proliferate and inform one another. Finally, I tie these two strands together, examining the proliferation of locals, and the importance of this to create a successfully global object, as well as the pluralistic framing and travels that facilitates these layers of localization, and thus, global travels.

Drawing on field work in rural Tamil Nadu, Sujatha (2007) examines the knowledges and practices of different kinds of health and medical practitioners functioning with varying levels of formality. She argues that in the contemporary neoliberal environment of medical pluralism in India, there is no room for folk knowledge, or what she defines as ‘medical lore,’ as a legitimized source of health knowledges. Medical lore, in this framing, is a form of medical knowledge that is often not seen as a system because while it is systematized, it is rarely institutionalized. As a system of knowledge, it is built up over time through people’s experiences, and passed from caregiver to caregiver, but is not institutionalized in texts, schools, and certification programs.

From the perspective of medical lore, Ayurveda appears similar to allopathy in its institutionalization, conducted by those with formal training based on official texts. Sujatha defines 'medical lore' as a system of health knowledges that has been developed, systematized, and passed on over time, so that it creates a homogeneity in thinking (Sujatha 2003). Similar to what is sometimes referred to as 'folk knowledge', she writes that (2007:173):

> … medical lore exists as a knowledge system built around a set of concepts about the body, health and disease, with certain underlying epistemological principles. Characteristically emerging from and validated by people's lived experience, medical lore is based on people's understanding of their bodies and their bodies' environments.

This definition closely matches the kind of non-allopathic health knowledges that are included in *Where There Is No Doctor* and other Hesperian books: knowledge that has become systematized over time, based on the lived experience and understanding of people without institutionalized health training. One of the kinds of non-allopathic health knowledge that *Where There Is No Doctor* carries are herbal home remedies: these are a form of medical lore, as Sujatha defines it. She writes that "the collection of herbs and the preparation of medicines by the user has been a key source of knowledge-dispersion" in medical lore, dissolving "the knowledge-divide between expert and lay person" (Sujatha 2007:197). Including herbal home remedies as medical lore in a published and widely distributed and adapted book represents a form in which such knowledges are rarely institutionalized. Following Sujatha and Abraham (2012:32), I use the word 'pluralism' to describe the history of "assimilation, change and transformation" among systems of medicine in and around what is now India, including medical lore. I see Sujatha's choice of the word pluralism as embracing of Haraway's arguments that relational language should be power-sensitive. She is concerned about the role that different kinds of medical knowledges, including those usually designated as lay, play, and how they are systematized in ways theorists

often associate only with expert knowledges. In order to analyze the relationship between lay/expert and local/global dichotomies and breakdowns, I engage a postcolonial STS.

Warwick Anderson (2002, 2009, 2014; Anderson and Adams 2007) has made a strong case over the past decade for the need for post-colonial studies of science and technology. This chapter, and the dissertation as a whole, both responds to and builds on this call by conducting an explicitly postcolonial STS study that engages globalization theory but is designed to retain a focus on the history of interaction and multiplicity of voices. Anderson argues that the West does not have a monopoly on modernity, and the developing world is not the only place that is 'local.' Specifically, I build on his recognition of the proliferation of locals and modernities around the world, and the importance of recognizing the local, especially in globalizing claims. The travels, adaptations and translations of *Where There Is No Doctor* make especially clear the many levels on which something can be constructed as and perceived to be local, and the way these localizations layer to create a global object. In a recent addition to this call, Anderson (2014) argues that STS as a field has emphasized globalization theory, leading to excessive use of metaphors about flows and lending a tone of newness, as if the world had not always already been connected. Instead, there have been centuries of exchange among Indian, European, and American civilizations, including rich scientific and artistic exchanges before, during and after the period of colonization (Raina 1996). India itself has a rich history of communication, conflict and trade both within what makes up its current borders and from those regions across oceans and mountains. Bringing in postcolonial theory demands an acknowledgement of how the world has been, and the ways in which current patterns of inequality are directly related to past experiences. It also emphasizes the ways in which the world has always been connected.

This reconsideration of globalization literature is key to the framing of *Where There Is No Doctor* as a successfully global object. In globalization literature (for example, Giddens 2002), the argument is often made that what makes things global is a kind of homogenization, in which the West creates and disseminates the hegemonic default. In this chapter, I argue that the creation of a successfully global object, while in this case traveling through the US, depends fundamentally on the ability of that object to be adapted to reflect the knowledge, environment, and needs of the area to which it is traveling. Key to these travels are the kinds of knowledges and the pluralistic knowledge structure the book carries, including medical lore. Medical lore is a form of medical knowledge that undermines lay/expert divides through the production and use of remedies in the home. Through ongoing adaptations, layering of knowledges usually considered to be lay creates a form of medical expertise that reflects the layering of locals and co-creates *Where There Is No Doctor* as a successfully global object. Together, these theories about local/global and lay/expert divides, and the ways that layering of locals and lay knowledges can create global and expert knowledges provide a set of tools with which to think about layers of localization in the context of medical pluralism, and the ongoing creation and travels of a successfully global object.

Findings: layers of localization make a successfully global object

I argue that layers of localization create a successfully global object. In parallel, I argue that layers of medical knowledges, including lay knowledges and medical lores, create the form of pluralistic, critical medical knowledge carried in *Where There Is No Doctor*. The book travels with an open copyright and an explicit invitation to adapt the book for one's community. In the

introduction to the book, David Werner writes "to be fully useful, this book should be adapted by persons familiar with the health needs, customs, special ways of healing, and local languages of specific areas" (Werner et al. 2009). Adaptors and translators take this invitation seriously. It is retained in adaptations and acted on throughout the books. The changes that result from the response to this invitation are particularly salient in two empirical arenas: illustrations and herbal home remedies, both included throughout the book.

The adapted illustrations in Indian editions of *Where There Is No Doctor* demonstrate the ways in which it is the books' localizability that makes them mobile, allowing them to travel across borders and beyond the confines of the page, and be taken up and used. Editors change images in the hopes that readers will literally 'see' themselves on the page, adding and rejecting changes in dress, bodies, and other signifiers to create new iterations. The localizations that are demonstrated in the adaptations of the herbal remedies reflect both these arguments about how and why the book travels and reveal an important corollary: the way in which lay knowledge is invited, taken up, and travels with the book. The book carries, on the one hand, a form of critical allopathy, complete with health care instructions and medical formularies alongside warnings about the dangers and overuse of such methods. It also carries lay knowledges and medical lores, given the same treatment of institutionalization and critique, and layered to create forms of medical expertise. Together, I argue that these many localized iterations create a successfully global object: its many proliferations achieve mobility and facilitate widespread uptake. This pluralism, visible on the page, illuminates the many levels at which something is perceived to be local, to be of or from a place, a community, a region, a culture. I argue that *Where There Is No Doctor* is a successfully global object because of the way it travels across and recognizes locals, drawing on and reifying the kinds of images and knowledge that readers will recognize as Indian,

Tamil, or Kannadiga. The first findings section below takes up changing illustrations, arguing that it is the layering of localization that makes the book a successfully global object. The second section focuses on changing herbal home remedies and the way this pluralistic text travels in a medically pluralistic environment to argue that the diversity of medical knowledges included reflects a layering of knowledges that mirrors and reinforces the layering of localization seen in illustrations.

Changing illustrations: Images should be like… our images

As the translators try to see through the eyes of future readers, they construct a world – a local – that they recognize, and hope that their readers will recognize. The worlds they depict in adapted illustrations are ones they perceive as Indian, Tamilian, Kannadiga, South Indian, North Indian, and so on, as designated by clothes, hairstyles, crops. In the process, these signifiers are reified as representative of what it means to be Indian, Tamilian, etc. Tracing the changes in illustrations across editions of *Where There Is No Doctor* and related texts demonstrates the ways in which Indian editions were adapted from the Mexican Spanish and American English editions, and how regional language editions are often adapted further from the English for India edition. They also trace the iterative development of concepts of local, and how the invitation to make local ultimately creates *Where There Is No Doctor* as a global object.

The preface to the book provides an overview of community health work, and in its 30 pages, there are over 60 illustrations. This density of imagery is maintained throughout the text and is a core part of the way knowledge is structured and shared within it. The Indian translators I interviewed noted that illustrations in the book are mostly of non-Indian people, including the original illustrations of Mexican villagers as well as more recent images of people from different

parts of Africa, the Middle East, and Asia[29]. Translators emphasized the importance of adapting illustrations, when they had the resources to do so, re-drawing anything that designates geographic and cultural location: clothing and hair, common animals and crops. Those working in north India, including those involved in the original English for India adaptation, didn't note regional differences in dress. Those working in south India noted the importance of recognizing such differences, arguing that there is no 'pan-Indian.' I draw on two cases to explore these dynamics. The first case explores how participants talk about the signifiers that identify an illustration of a woman as Indian, focusing on illustrations of women for educational posters adapted so that they appear familiar to the health workers the images are used to train. Editors change illustrations with the hopes of making the images familiar to their readers and students; users also push back and request adaptation. In this exchange, power dynamics are both upended and reified as those usually assumed not to have valuable knowledge are taken into account, and histories of colorism (Walker 1983) are reified on the page. The second case looks across the same set of illustrations as they appear in six different printings, arguing that layers of localization are created as decisions are made to alter or re-use variations of the original. Such decisions—and the localizations they produce—make the book a successfully global object.

Examining the adaptation of illustrations of women to appear 'Indian' provides a helpful first look at the way that aspects of the body and dress are used to help readers 'see' themselves in the book. Dr. Mira Shiva, who helped lead the adaptation of *Where Women Have No Doctor* for VHAI, recalls, "there were some illustrations with black people with no hair... I remember saying that in India it won't work, because you shave your hair if you are a widow." This

[29] As Hesperian has developed new materials, they have intentionally commissioned drawings for books from a variety of illustrators, reflecting a range of cultures and geographic settings. This style of diverse illustrations was developed during the writing of *Where Women Have No Doctor* in the 1990's and implemented in all books written and updated since.

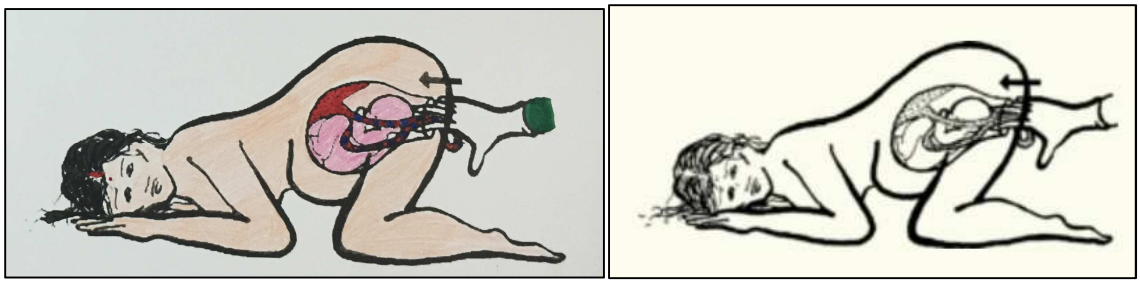
sentiment was reflected by staff at Jan Swasthya Sahyog (JSS), a non-profit that provides care to a predominately tribal population in rural Chhattisgarh. They use English and Hindi editions of Hesperian books, and translate as needed to Chhattisgarhi, which is closely related to Hindi. For community health worker trainings, the staff selected images from *A Book for Midwives*[30] and made large copies for educational posters. Lokesh, a program coordinator, and a senior health worker I'll call Rajkumari[31] discuss the adapted drawing shown in Figure 12.

> Lokesh: This is training materials for *dais* [traditional midwives], so most of the pictures are from Hesperian, we just made the color. But sometimes they… अब दाई ऐसा नही पूछते की ये तो यार औरत अपने यहाँ की नही लग रही है, है ना? [32] [don't midwives ask that these women are not from our place?]
>
> Rajkumari: हम लोग बताते है की जैसे हमारा देश है, वैसे ही हमारे देश जैसा कोई और देश है |वहा पे ये किताब बनी है, तो वहा की महिलाओं का फोटो है □□में]We used to tell them like our country, there is another country, where these books are made. So pictures of women from that country have been used here.]
>
> Lokesh: The *dais*, they ask [why] these women are not Indian women, [why] they are not looking like anything [they know].
>
> Rajkumari: □□का चोटी को लम्बा बना दिए है]We drew her long hair.]
>
> Lokesh: They just extend the *choti* [small or short]. So they can easily identify. They think images should be like… our images.

[30] A book published by Hesperian, the non-profit publishers of *Where There Is No Doctor* (see introduction for full list of related publications).

[31] All names are real, unless noted otherwise, as in this case. Participants who signed consent forms in English chose whether to be on the record, or to use pseudonyms. Interviews conducted in Hindi, Tamil, or Kannada were all anonymized to protect identity.

[32] Transcription was done in the languages spoken: in this case, a mix of Hindi and Indian English. Translations are included here in brackets. Hindi words commonly used in Indian English in this region are transliterated, indicated in italics, and translations are included in brackets the first time they are used.



JSS poster adaptation

Original image: page 177

Figure 12: Illustration from *A Book for Midwives*, adapted as an instructional poster for use training community health workers in Chhattisgarh by Jan Swasthya Sahyog (JSS)

For these educational posters, Lokesh and Rajkumari added signifiers of Indian womanhood and marriage: a long braid with *sindoor*, a line of red powder along the front of the part, and a round *bindi* on the forehead. The traditional midwives these posters are being used to train live and work in remote areas. They have likely never traveled far from their villages or region of the state and have limited exposure to popular media. They are confused as to why JSS would use unfamiliar figures to teach them, and senior health workers have responded by adapting illustrations to look more like the women the midwives support. The fact that the traditional midwives feel that they can push back on the structure of knowledges presented to them reflects the idea that their knowledge, experiences, and needs are valid health knowledges. Such acknowledgement is built into the knowledge structure of JSS and the books that it uses for training. While this should not be a radical point of departure, it varies sharply from the knowledge structure of many global health projects, which often fail to integrate and the value of the health knowledges of participants. The *dais* place importance on showing long hair; as Mira Shiva notes, in many parts of India, women have traditionally shaved their heads if they are widowed. Adding long hair indicates that a woman is not widowed. Adding the *sindoor* and *bindi* indicates she is married, signaling social approval for her childbirth. By providing feedback

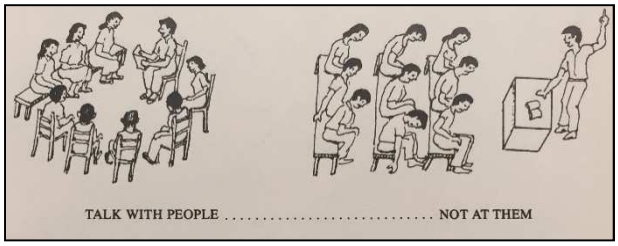
and asking why the adaptation is not more familiar, the *dais* are directly impacting the institutionalization of knowledges at the level of adaptations.

While some adaptations function mostly to make the illustration more familiar and acceptable to the intended audience, like the *sindoor* and long hair, other are designed to make the educational point of the illustration easier to interpret. For example, JSS staff added color to the illustrations to clearly show different parts of the body and procedure: in this case, how to adjust the baby's head so as not to cut off blood supply if the umbilical cord has come out before the baby. Because these illustrations are being used for posters, rather than printed in a book, they can be colored in. Lokesh and Rajkumari agree that this helps the illustration to be clearer, although the colors chosen don't reflect the skin tone of the tribal communities. In this instance, the localization of the *sindoor* and *bindi* is contrasted against a form of adaptation – adding color to body parts – that reflects hegemonic beauty standards that privilege light skin both in India, and around the world. While the *dai's* medical knowledges are being respected by people trained in forms of allopathy in a way that is rare even between midwives and allopathic clinicians in the US, some of the adaptations made based on those acknowledgments still reflect the colorism that has traveled with invasion, colonialism, and slave trades around the world.

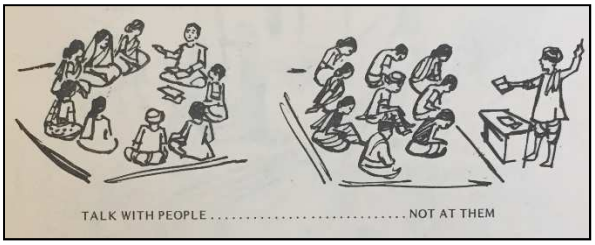
To further explore these dynamics, I analyze a pair of illustrations across six editions of *Where There Is No Doctor*: American English, two editions of Indian English, Hindi, Tamil, and Kannada (current editions at the time of data collection, except for the original Indian English). Looking across this set of illustrations will provide an empirical way in to exploring the layering of localization over time and across and within adaptations and translations. The pair of illustrations, shown in six iterations in Figure 13, are from the preface of the book, which provides a basic overview of community health work. They illustrate a key concept from popular

education (Freire 1970) – the importance of talking with people, rather than at them.[33] First, it is important to note what stays the same across these images. The underlying idea, focused on the type of relationship between teachers and students that will best facilitate health education, remains the same. People are shown teaching, learning, listening, talking, sitting and standing in similar relationships to one another, demonstrating the importance of the teacher talking with, rather than at, students. The relative numbers of students and teacher remain constant, as does the book in or near the teacher's hands – presumably their copy of *Where There Is No Doctor*. What stays the same reflects both underlying concepts that translators want to maintain, and items that are recognized across locations, such as the desk and book. Localization, and the proliferation of locals, do not imply complete breaks from the object being adapted: some aspects are not recognizable across locations, while others, including the book itself, are.

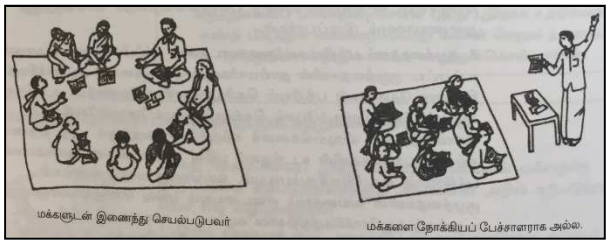
[33] Concepts from popular education underlie much of the pedagogy in *Where There Is No Doctor*. The companion educational manual, *Helping Health Workers Learn*, describes more explicitly what popular education models entail, and how to adapt them for health. For example, in a section titled 'Paulo Freire's Method of Conscientization', the authors write "It is essential that the group leader genuinely feel that all persons in the group have their own knowledge and valid points of view. That way, everyone can learn from each other. The line between 'teacher' and 'student' is broken" (Werner and Bower 1982:26-16).



A. American English edition (2009)



B. Indian English edition (1981)



C. Tamil edition (2013)

D. Kannada edition (2011)

E. Indian English edition (2014)

F. Hindi edition (2014)

Figure 13 A-F: Illustration from *Where There Is No Doctor*, page w25, from the preface titled 'Words to the Village Health Worker'

Comparing these six editions, we can see the original illustration (Figure 13A) of a community health worker in a mountain town in Sinaloa, Mexico, teaching his students in the American English Edition.[34] He is wearing trousers and a short-sleeved button-down shirt. For the first English for India adaptation (Figure 13B), the teacher was re-drawn wearing a *dhoti* wrapped around his legs, a *kurta*-style shirt, and a turban. The students were re-drawn wearing similar clothes for the men, and *saris* for the women. The students are depicted sitting on the floor, and the teacher removes his head covering when sitting more informally with the students. The clothing and classroom setup designate the people and space as Indian: the turban is more common in North Indian desert areas with dry heat. This illustration was used for the current Hindi edition (Figure 13F), produced by the same publisher. For the Tamil edition (Figure 13C), the illustration was again adapted, to appear more specifically south Indian. The teacher is wearing a *lungi* around his legs rather than a *dhoti*, a shirt that appears closer to a western business-style shirt and signals less about regional location, and no headwear. The students are also re-drawn, with some men shirtless or in tank-tops, and the women in *saris*. The *lungi* is common in more tropical areas with wet heat, as are men wearing limited tops.

The English for India illustration was used for the south-Indian Kannada edition (Figure 13D); the fact that this drawing was not further adapted for the Kannada edition (as it was for Tamil), could be explained by a variety of factors. One is resources: the Kannada edition was translated and produced by a couple and their network of supporters, so they had fewer resources for re-drawing illustrations, whereas the Tamil editions have been produced by small publishing houses and a regional branch of a large non-profit. In addition, in Tamil Nadu the politics of maintaining pride in Tamil language and culture as distinct from north Indian culture is

[34] It is notable here that the images were not adapted in the translation from the original Spanish to English. Therefore, the teacher here can be assumed to be speaking to his students in Spanish, or in a native language.

particularly pronounced. Karnataka is also further north, bordering the culturally and linguistically more North Indian state of Maharashtra. Translators may also have different ideas about what is needed to make something local. For the new English for India (Figure 13E), the illustrations were completely re-drawn, with women leading the classes and a mixed group of students. It is notable that the new illustrations, shown here in the 2014 edition, feature female teachers – this was likely influenced by the national ASHA program, which has trained 900,000 female community health workers since 2006 (as discussed in chapter 1), shifting the public image towards women as community health educators.

What changes in these illustrations is the representation of the people, so that they appear recognizably 'Indian' or 'Tamilian', so that the Indian, Tamilian, and Kannadiga readers might see themselves in the text and its illustrations. Clothing and furniture are changed to indicate region. Later, the gender of the instructor changes to reflect shifts over time in who is trained as community health workers. There are changes that jump continents – students on chairs in the original image, and on a mat on the floor in Indian images. And there are changes that make more subtle shifts – a different kind of cloth wrap for men's legs indicating a shift from the northern to southern end of the continent, as well as a shift in clothing more common in dry versus wet heat. Changes over time, like the increasing public role of women as community health workers, are also reflected, demonstrating the ways in which locals are always already changing and in development. Drawing on postcolonial theory (Chakrabarty 2000), it is important to emphasize here the ongoing development and production of knowledges within and between the locals that translators and editors do their best to reflect – and in doing so, actively create.

Layers of localization are apparent here: one layer as illustrations are adapted, another layer as they are adapted again for different settings, and other layers as they are removed from books and blown up to make posters and other teaching aids. The instances on paper – a hand-colored womb, or a printed image of a *sari*-clad community health worker leading a class – are important, but they are also snapshots of an ongoing transformation. It is exactly this motion, this invitation to ongoing change, that makes *Where There Is No Doctor* a successfully global object. Specifically, the invitation and ability to change while remaining recognizable creates the layered localization that we see in adapted images. The movement, of course, is not one smooth flow, but travels through power hierarchies, as a program coordinator fluent in English helps senior health workers with limited English to translate and adapt materials for traditional midwives who may speak primarily a tribal language. Across hierarchies of class, caste, and education, those midwives are able to push back, saying that the first round of adaptations they are presented with are still confusing – the women do not look familiar – and they ask for further changes. Some of the layered changes, like a red *bindi* and *sindoor*, do make the images look more like a village woman, or the midwives themselves. Other adaptations, like peach-colored skin and a pink baby, reflect hegemonic beauty standards that reflect centuries of colorism in India and around the world, from the invasion of the lighter-skinned Mughals from the Middle East to the slow takeover of the British Raj. Here, the hegemonic Western 'default' that the books might represent is open to criticism, and to change – change that is both breaking down barriers of communication and reifying power hierarchies. It is not the 'global' object that creates or makes valuable the local iterations. Rather, it is those local iterations that bring a global value to the overall project, now made up of many editions.

What about the knowledge structures within the book itself, as well as the spaces it travels in and across facilitates this? We turn from changing pictures to changing herbs to explore the pluralistic knowledge structures that enable this.

Herbal medicines: We also knew them

In this section, I argue that *Where There Is No Doctor* is able to travel in a context of medically pluralist India because it is itself medically pluralistic, including both institutionalized space for and critiques of the systems of medical knowledge that it carries. When editors talked about what they adapted or changed in *Where There Is No Doctor*, they brought up a variety of health issues that they expanded or added. The one section of the book they all brought up, and often mentioned first, was herbal remedies[35]. I define the herbal remedies listed in *Where There Is No Doctor* as a form of medical lore (Sujatha 2007), institutionalized in this text in a way that such kinds of medical knowledge rarely are. Here, I demonstrate a layering of localization through the adaptation of herbal remedies that mirrors the changing of illustrations described above. First, I review the role of allopathy and medical pluralism in India and in the text. Next, I analyze the kinds of knowledges being drawn on in adapting herbal remedies, arguing that the knowledges taken up and institutionalized here are a form of medical lore. The inclusion and institutionalization of such medical lore represent a layering of knowledges usually considered to be lay, into a structure in which they are recognized as a form of expertise. While herbal remedies are included throughout the book, they are also concentrated in a section of the first chapter. Comparing this section of the book across editions, I argue that the layers of localization

[35] The second most common changes described in interviews is updating the allopathic medicine pages included at the back of the book to reflect government guidelines, and generic and brand names of medications.

seen in changing home remedies mirror the layers of localization seen in changing illustrations and demonstrate the ways in which the book travels as a successfully global object, codifying its own critical form of layered, pluralistic, critical medical knowledge.

India has a history of taking up many medical systems. Medical pluralism in India includes allopathic medicine, herbal medicines as practiced by a variety of trained herbalists and informally educated individuals (Sujatha 2007), and AYUSH, a set of non-allopathic medical systems officially recognized by the Indian government. AYUSH stands for Ayurveda, Yoga, Unani, Siddha, and Homeopathy. Ayurveda and Yoga are based on ancient Sanskrit texts and are associated with the northern languages and cultures that traveled with that language family. Siddha originated in ancient Dravidian texts; one South Indian Catholic priest I spoke with described this as the only 'truly' Indian form of medicine, because it was developed and written in southern, Dravidian rather than northern, Sanskrit texts. Ayurveda and Siddha both date back to at least 2000 BCE, and have complex histories of travel, institutionalization, and overlap (Sujatha and Abraham 2012). Unani originated in the Middle East and traveled to India 800 years ago from West Asia (Sujatha and Abraham 2012:1). Homeopathy was developed in the first half of the 19th century in Germany (Baer 2004:51) and came to India shortly afterwards, following allopathy (Sujatha and Abraham 2012:1). Alongside these, a wide variety of herbal medicines are practiced by both formally and informally trained people across the country. While allopathy maintains a hegemonic dominance in India in some ways similar to its role in the US, and people use multiple sources and systems of knowledge to think about health around the world, the regularity of thinking with and through a variety of medical systems is normalized in India in a way that is hard to imagine in the US. In this manuscript, I follow my participants who

use the term ‘allopathy’ to describe biomedicine, and the acronym AYUSH to refer to non-allopathic institutionalized systems of medicine within India.

Medical pluralism is thus omnipresent for the editors and translators of *Where There Is No Doctor*, and for this significantly allopathic book to travel it must do so with other medical systems. This pluralism allows it to be mobile and recognizable to both translators and readers and is a key contributor to the book’s success as a global object. In the late 1970’s and early 1980’s, when *Where There Is No Doctor* was first adapted in India, there was an active conversation about the role of non-allopathic forms of medicine, the relationship between medical systems and capitalism, socialism, and the state, and the relationship between herbal medicine, ancient systems such as Ayurveda, and allopathy (Mehrotra 1986). The practice of health and medicine, then as now, was pluralistic and heterogenous across class, caste, and region. Reflecting global trends, allopathy was perceived as dominant by the upper castes and classes. However, there was also increasing interest in recognizing and supporting other forms of medicine. Dr. Ritu Priya Mehrotra, a public health scholar, describes the conversations she was part of in the 70’s and 80’s this way:

> You have the more left kind of an activists saying that its demystifying modern knowledge which is the important thing and all this talk of all this traditional knowledge and so on is bogus... And some of us are arguing that you have to start where people are and their knowledge has to be respected.

Ritu Priya describes two positions here: one that clearly privileges allopathic knowledge, but with a focus on “demystifying” it so that it is available and accessible to everyone, and the other that privileges starting with people’s own knowledge, assuming that for many people, such knowledge would be a form of medical lore rather than allopathy.

As a text, *Where There Is No Doctor* both demystifies allopathic medical knowledge and provides both institutionalized space for and critique of medical lore. In order to hold both of these positions, *Where There Is No Doctor* carries a specific kind of allopathy, one that recognizes non-allopathic expert knowledges and critiques. The introduction to the book states six core beliefs, including that "ordinary people provided with clear, simple information can prevent and treat most common health problems in their own homes – earlier, cheaper, and often better than doctors; medical knowledge should not be the guarded secret of a select few, but should be freely shared with everyone; people with little formal education can be trusted as much as those with a lot" (Werner et al. 2009). Generally, allopathy privileges its own forms of knowledge, science and evidence. In the context of this book, allopathy is placed alongside other knowledge systems in the text, with written critiques of each. This is demonstrated in an image from the American English text of a gun shooting pills rather than bullets, along with the phrase "remember: medicines can kill" (Werner et al. 2009:w18), shown in Figure 14 below. The image is included in each translation, and unlike the images discussed in the previous section, this image is rarely changed.

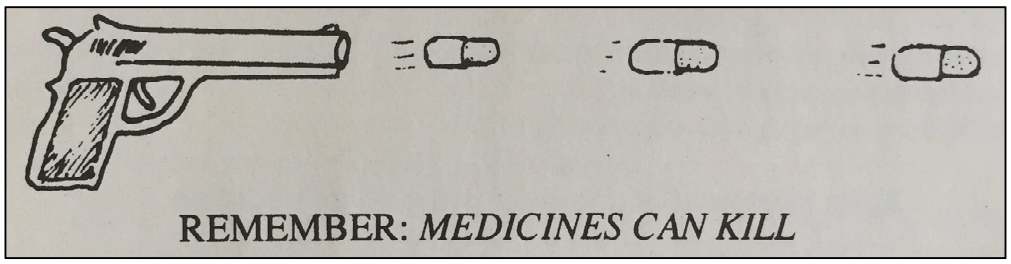


Figure 14: Illustration from the American English edition of *Where There Is No Doctor*, page w18, from the preface titled 'Words to the Village Health Worker'

This image presents a kind of ambivalent allopathy, one that recognizes its own strengths and limitations, and in that sense is always already pluralistic: it is making room for other ways of knowing without assuming to state what those ways will be.[36] This medically pluralistic space makes institutionalized room on the page for a variety of medical lores, included throughout the text and highlighted near the beginning of the book. Chapter 1 of the American English edition is called 'Home Cures and Popular Beliefs' and includes a section called 'medicinal plants.' The list of herbal remedies included there is shaped by the Spanish-language original volume, written in a rural mountain town in Mexico. The content fills a two-page spread, and includes Angel's trumpet, corn silk, garlic, cardon cactus, aloe vera, and papaya (see Figure 15 for a sample excerpt). Along with each description are cross-references to the discussion of ailments elsewhere in the book; those locations include cross-references back to the medicinal plants page. This reflects the medical pluralism built into the book, as different ways of understanding and responding to health and illness are presented in relation to one another. Explicitly encouraging adaptation, the spread also includes the phrase "try to learn about the herbs in your area and find out which ones are worthwhile" (Werner et al. 2009:12). This is contextualized by the rest of the chapter, including suggestions for analyzing the relative value of different kinds of remedies and which might be helpful, neutral, or harmful. While there is a lot of directive advice included, the authors trust the reader to make decisions: this reflects the likely reality that the authors and editors, as well as trained clinicians, are not available at the time and place the book will be read, and the trust that the book implicitly places in the ability of the reader to take action for health. This level of pluralism – leaving space for lay and other knowledges about health –

[36] *Our Bodies, Ourselves* is an example of another book that is written with and carries a critical allopathic lens, including both allopathic and other forms of health knowledges in the context of a philosophy that trusts the knowledge, experience and choices of non-allopathically trained individuals to care for themselves (Davis 2007).

makes room for the complex levels of pluralism enacted through and traveling with the book as it is adapted in and for the medically pluralistic context of India.

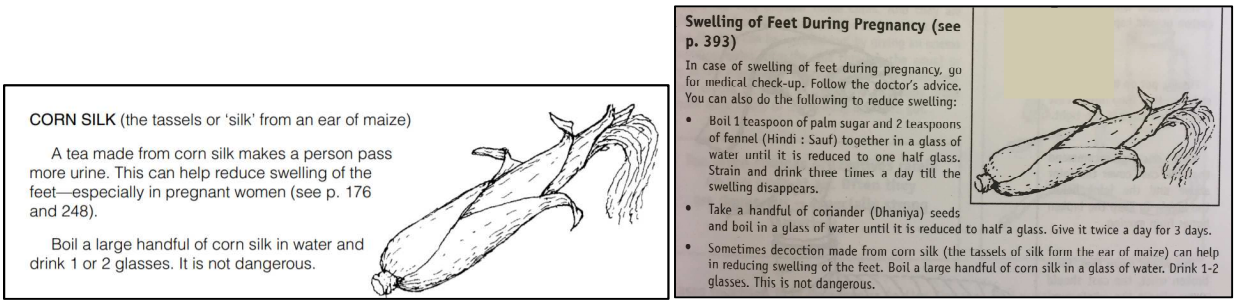


Figure 15: Illustration from American English *Where There Is No Doctor*, Chapter 1, page 12, from the section titled 'Medicinal Plants'; adapted content, Indian English, page 25, from the section titled 'Some Helpful Home Cures'

When these herbal remedies are adapted in layers of localization, a variety of what is usually considered 'lay' knowledges are drawn and built on. I argue that such knowledges, systematized but not institutionalized, are a form of medical lore. Nisa and Sadhiq published the most recent translation and update of *Where There Is No Doctor* in Tamil. Nisa, who is trained as a nurse, described how she thought about and adds herbal remedies, drawing on non-institutionalized health knowledges, passed down between caregivers:

> … because if we are just using the Hesperian book to exactly translate like that it would be easy, but when we are refining this to suit our society's needs, it is difficult. We have to work very, very judiciously. There are times when I have asked women, 'can you just tell me exactly that thing which will be used for cleansing the uterus after the baby is born?' There are things which I have consumed myself which my parents have given me… passed down generations. A powder made of plenty of herbs, roasted with ghee, small balls are formed and you have to take it with roasted garlic… it provides you immunity, it cleans up your uterus without any infection. It provides galactagogue[37].

[37] A substance that increases a mother's milk.

> Meaning, it gives women fitness, and your child is also illness free in the first three to six months. Hesperian has this [herbal remedies] at a very minute level, so we increase it.

Nisa and Sadhiq translated from both the American and Indian English editions and updated previous Tamil translations done by another publisher and a state branch of VHAI, respectively. The story Nisa told reflects the way in which much of lay health knowledge is passed down – from mother to daughter, and from neighbor to friend. This pattern reflects the importance of lay knowledges for health, and the ways in which pluralism carries across formal systems and includes the wide variety of ways people practice care and medicine in their homes. It also draws on the labor and knowledge of those often considered not to have valuable knowledge, both upending this dynamic and replicating it though the unpaid labor of sharing those knowledges.[38] While such knowledge is sometimes codified in advice books, it rarely travels in a book with the global reach of *Where There Is No Doctor*. And when this largely allopathic book travels, it explicitly invites adaptation, based on both allopathic knowledge and other forms of knowledge. It suggests adding medical lore in the form of local herbs – the kind of information that is almost always passed informally person to person, as well as through local herbalists. What is different is that *Where There Is No Doctor* provides a space in which this knowledge is placed side by side with allopathic remedies, in a framework in which both are presented as valid, and as worthy of critique.

In this medically pluralist text, traveling in a medically pluralist context, allopathy and medical lore travel together, and both are institutionalized and critiqued. Alongside instructions

[38] In chapter 4, I explore the role of those not usually considered to have valuable knowledge in the production of new knowledges through translation, analyzing the role of paid domestic workers in assessment of the comprehensibility and utility of the words on the page. Here, I am focusing on the labor and knowledge of a group of people who are similarly not considered to have valuable knowledge in providing specific knowledge about medical lore.

for the use of each are instructions for thinking through when each might be useful, or harmful. They are also adapted, localized in layers, in a way that mirrors the layering of localization I demonstrated through adapted illustrations above. Analyzing the adaptation of the 'medicinal plants' section from chapter 1 of the text across editions demonstrates the complex layering of locals while acknowledging the pluralistic organization and use of health knowledges. Comparing the first English for India edition of *Where There Is No Doctor* to the American English version, the 'medicinal plants' sub-section has been re-named 'some helpful home remedies' and expanded from two pages to eight and a half pages. The content has also been re-organized by symptom rather than plant: in Figure 15, the content included under 'corn silk' in the American English edition is adapted and included under a heading on 'swelling of feet during pregnancy' in the Indian English. Examples of categories include general complaints such as cough and cold or intestinal cramps, as well as more specific ailments such as sore throat or diarrhea. The re-structuring around ailment reflects both allopathic thinking about health (rather than, for example, an Ayurvedic structure, which would be organized around different categories), and a pluralistic acknowledgement of the value of medical lore alongside other forms of care. It also places the herbal remedies on equal level with other treatments for the given ailment, underscoring the pluralist orientation of the text. The expansion reflects a potentially larger role for 'home remedies,' expanded as a concept from 'medicinal plants.' In some ways, this steps away from allopathy, framing the home as a source of health, rather than plants as an alternative to allopathic drugs.

Most of the home remedies and instructions from the American English edition are included, in some cases along with names that might be more familiar such as the Hindi 'dhatura' for Angel's Trumpet. Plants from the original edition that are found in parts of India

are retained: corn and papaya, for example, are not equally common in every state, but are widely known. Occasionally, names of herbs are given in Hindi and in Tamil, but not other languages, likely because the original editor is of Tamil origin, and VHAI translated and distributes the Hindi edition. In Figure 15, for example, the Hindi *sauf* is given for fennel, and for coriander, *dhaniya*, a word used across the country. This is a nod to language translation within English as well, with some names in different languages, reflecting an Indian English that is both distinct from other forms of English and varies across the country. Finally, in the current edition, additional instructions are added at the front, for collection and storage of herbs, and for decocting, and making powders and ointment.

These layers of adaptation were done to create and update the national adaptation. Padam Khanna, who oversaw the editing, updating, and distribution of VHAI's English for India adaptation the first decade and a half it was in print, talks about what he felt was important to revise:

> You see the very first chapter on the home cures we had to revise totally, because home cures and beliefs in India were very different. And then some of the things never existed here, were never part of the culture and never part of the system here. So some of those were removed and the Indian beliefs and home cures were added on.

Padam, who was born and raised in Delhi,[39] speaks confidently of the differences between India and the US, and the concept of Indian beliefs and home cures. While the chapter includes content on both beliefs and cures, the analysis here will focus on the home cures (previously 'medicinal plants') sub-section described above. As an editor responsible for the English for India edition, Padam focuses on his conception of the distinction between the beliefs and cures in the

[39] Delhi is the seat of the national government, and many national offices. It is also a northern city marked by the partition with Pakistan after independence, and the rule of the Mughals who invaded from the north west and ruled large portions of the country before the arrival of the British.

American English text, and beliefs and cures in India. In doing so, he constructs the beliefs in the American English text as other (neither more or less inherently valuable, but lacking value of the local setting), and Indian beliefs and cures as a relatively homogenous entity, a local. As someone who has been responsible for helping to design and implement programs for the country, from the perspective of national projects, it makes sense that Padam and people in roles like his have an interest in seeing all of India as one local. He helped to seed regional translations of *Where There Is No Doctor* and is far from assuming any homogeneity in the country; however, his role in this project was to create a national local.

South Indian authors make further distinctions. Sharada and her husband Gopal translated *Where There Is No Doctor* into Kannada, a South India Dravidian language descended from ancient Tamil and spoken primarily in the Indian state of Karnataka. Gopal is a doctor, Sharada's background is in journalism, and they have spent their lives supporting community organizing efforts. When I asked Sharada what she had changed or adapted while translating VHAI's English for India book, she quickly replied that they had changed the home remedies section, adding local medicines, but that otherwise the book remained almost sentence by sentence the same. Reflecting on these distinctions, she continued:

> My mother and my elder sister, they all use a lot of home remedies, so some of them I knew myself and I asked around. We did not add much because the book we translated was already Indian-ized, it was the Indian version of *Where There is No Doctor*, so most of the remedies were given in that book also. We are all Indian and we also knew them. Some very few words were taken from the Hindi-speaking part of the country, so such things we have changed… There is a small section on fever, the home remedies for fever, even I knew what is to be done. We have some plants which we use in villages, so I wrote about it. Mainly my mother, sister and neighbors and relatives, we asked. They all know the South Indian home remedies. And because we are coming from the Western Ghats we depend more on home remedies.

Here Sharada makes a few different levels of distinctions in what it means for a book to be local, both layering on and complicating the level of local-ness that Padam designates as 'Indian.' First, she acknowledges the work already done by VHAI to make the book relevant to and reflective of an Indian context, and the ways in which that work reflects her experiences and needs as a translator. In doing so, she acknowledges the existence of herbal remedies used across India, reflecting a ubiquity of use and taken-for-granted belief in the value such remedies. On this level, she recognized the Indian 'local' that Padam refers to. Her easy confidence also reflects the way in which medical pluralism is not just a rhetorical state but is lived and enacted in such routine ways so as to become almost unremarkable; such ubiquity can make it difficult to see, analytically. Haraway's (1988) reminder to conduct a "power-sensitive" analysis here is a helpful guide for observing what gets constructed as a national local, and the power that carries in structuring knowledge across the country. In some cases, a focus on what is local and unique can elide attention to what is routine or ubiquitous. Thinking with layers of localization helps to counter that tendency, and to bring out trends of what stays the same, what is assumed as common knowledge, and how those factors shape localization just as much as what is different or unique to a constructed local. What is not changed, in these cases, can reveal as much about the construction of larger, national or even international locals, as what is changed to make something recognizable. The use of the roots turmeric and ginger, for example, are widely discussed across India, and not associated with one specific medical system, but used across many.

Second, Sharada distinguishes words that are common in Hindi-speaking parts of North India, and that those would need to be translated into Kannada along with the bulk of the English-language text. Padam's family and identity are distinctly North Indian and tied to the

capital city of Delhi. Sharada's family and identity are distinctly South Indian, specifically Kannadiga (from the state of Karnataka), and from the highlands of the Western Ghats, although she has spent her adult life in a medium-sized urban center. Both Sharada and Padam have traveled and worked across a variety of settings in India and Europe. For Padam's Indian English adaptation, the illustration changed both the dress of the teachers and students and shifted the classroom setup to one where students sat on the floor, and the teacher joined them there. For the Tamil edition, the clothing changed further, but maintained some overlap. The setup of the classroom, with a mat on the floor for cross-legged students, remained the same. While Sharada and Gopal chose not to change the illustrations for their Kannada edition, they did adapt the herbal remedies in a way that mirrors the changing illustrations in the Tamil edition. Here, one level of adaptation gets you to 'India' – but a South Indian audience sees that as North Indian and adapts it further (given the resources to do so).

Third, Sharada points out that there are additional remedies local to South India, and to the Western Ghats, a mountainous region in the state of Karnataka where she grew up, that were added based on her knowledge and the knowledge of family and friends. As reflected in Nisa's quote above, such knowledge is rarely institutionalized at the level of a village herbalist, but is understood to be carried, produced, and used by those without institutionalized training. Once again, Sharada's comments reflect the ubiquity of herbal knowledge, and the way it is carried as medical lore (Sujatha 2007). People living in the mountains often have less access to formal systems of medicine because of lack of roads and travel costs and time. Medical lore is part of everyday life and knowledge, particularly for those who grew up in areas with limited access to the formal allopathic or other medical systems. While professional experts on herbal medicine as utilized in various systems of medicine are available to consult, this section of the book routinely

draws on the everyday knowledge of mothers and other caregivers who have provided care outside of a formal medical system. In a pluralistic system, such variety of institutionalization and structure of health knowledge production becomes naturalized, and the ability to draw on and use multiple systems with varied histories and access points becomes routine. The structure of *Where There Is No Doctor* reflects this way of thinking, the pluralist nature of the book facilitating its travels in medically pluralist India.

In this book, herbal medicine is placed alongside and in cross-reference to allopathy, and critiques are included for both, reflecting a fundamentally pluralistic perspective. On the other hand, the space for herbal medicine is limited, and other formal medical systems such as Ayurveda are not included. To do so would require, perhaps, an entire additional text, on *Where There Is No Ayurvedic Practitioner*. What this pattern reflects is a form of medical pluralism that includes not just medical systems seen as systems, but also the kind of medical lore (Sujatha 2007) that is often not seen as a system at all. The structure of Ayurveda and allopathy are so different – from the level of how health is conceived, to the questions a practitioner might ask and the formularies and activities they might prescribe – that combining them both in a book would require an untenable number of pages, particularly for a book meant to be picked up and used right away. Medical lore, built over time and structured in its own way, but never institutionalized in the kind of foundational texts, schools, and certification that Ayurveda and allopathy both claim, fits alongside other systems in a way that two institutionalized systems are harder to situate together. Here, such medical lore – passed between mothers and daughters, herbalists and their apprentices – is placed in a book alongside hegemonic allopathic medicine, traveling together, with their critiques. In the process, herbalists are not consulted, as an Ayurvedic doctor would have been for a section specifically reflecting that system. Instead, lay

knowledge is gathered from family and neighbors, reflecting the kind of people editors and translators hope will be reading the book. The structure of the knowledges being drawn on – their very ubiquity and production, travel, and use in the home – makes convening a set of what would usually be considered 'expert' reviewers unnecessary. Acknowledging such health knowledges as valid content for a book reflects both the pluralism of *Where There Is No Doctor*, and of India. It also reflects the invitation to change that leads to layers of localization and layers of knowledges creating a form of critical, pluralist medical knowledge that results in the travels of this book as a successfully global object.

Conclusions

Where There Is No Doctor is an incredibly agile book. It maintains a recognizability across locations, but it travels by changing. The open copyright and explicit invitation are taken up and responded to again and again by editors, translators, and illustrators. Images are re-drawn, for use inside and outside of the text, and herbal home remedies are changed, along with updated information on HIV, diabetes, and a variety of other health topics. While the book as an object is analytically important, the spaces between the physical copies are just as salient. The conversations between people about adaptation and translation, the translation that happens verbally, as someone reads from an English or Hindi text and talks to an audience in Chhattisgarhi, the way health knowledge is added in and taken from the text, all matter just as much as the printed version. These are the bumpy, uneven movements of knowledge around the world: traveling in well-worn postcolonial and precolonial tracks, integrating knowledges designated as expert and lay, local and global, systematic and institutionalized. The books

reinforce and undermine hierarchies of knowledge with detailed instructions alongside room for critique, written and printed with an intended audience of community health workers with limited formal education and health background.

At the intersection of layers of localization is a medically pluralistic text, traveling in a medically pluralistic context, where a successfully global object is produced. It is produced in the sense that it was not a global object until it was taken up, used and reused, translated and changed and handed off, re-drawn and excerpted and read aloud by editors, translators, doctors, community health workers and caregivers. The changing illustrations and herbs in the text reflect layers of localization and the labor of many people: one layer adapting to a country or region, but always already indicating sub-regions. Other layers adapting to languages, states, dialects, tribal communities, each drawing on the experiences, appearances, and knowledges of different people. Some layers require leaving the page – images and text appearing on posters, in handbooks, or re-drawn on chalkboards. There is a poetry to the idea of changing an image, so a person can literally see someone like themselves represented in a book, but an equal importance to the changes in content that reflect local knowledges, systematized as they are passed down between caregivers over time. Here, medical lore that includes systematized lay knowledges gets taken up in a printed text – a level of institutionalization that it does not usually travel through – and placed alongside allopathy. While other systems of medicine, such as Ayurveda, do not fit in the text in the same way, they influence both the medical lore that is included, and the way the book travels as one more source, container and conduit of knowledge in a heterogenous landscape. It is also possible that the critical allopathy and medical lore carried in the book primarily reflect the postcolonial Mexican and US contexts in which the book was written, and do not in fact leave room for something as differently structured and institutionalized as

Ayurveda, Siddha, or Unani. This perspective underscores the ways in which even a pluralistic text is limited by the knowledge structures in which it is produced, despite efforts to be open to change.

Where There Is No Doctor, as a project, attempts to demystify allopathic medicine while making institutionalized room for other forms of knowledge and to trust editors to make changes and readers to take action. In the process, many power dynamics common across global health and development are undermined: centering allopathic knowledges to the exception of others, trusting experts to make decisions for marginalized others not assumed to have valuable knowledge or critical thinking capacity. Other dynamics are replicated, including the lack of space for institutionalized non-allopathic medical forms such as Ayurveda, reification of colorism, and the ultimate codification of the project in a written text available to people who are literate or have access to someone who might read to them.

The pedagogy on which *Where There Is No Doctor* is based trusts people and believes in their ability to learn. The book itself reflects this, and this trust – a trust in individuals and communities to take up the book, take what they want and need, take out what they do not, and add what they consider important – is what allows the book to travel, and to be produced as a successfully global object. Such trust does not obliterate history and power dynamics. Rather, it recognizes the history of discounting the knowledge and abilities of those without formal education and creates a structure so that, despite the ongoing reproduction of hierarchies of knowledge, including in the travels of the knowledge as a printed book, there might be space for people's ideas and experiences to travel, and to be useful to other communities. The result of this messy, uneven, and aspirational process is the production of a successfully global object, the global success produced by the people who localize it, one layer at a time.

Chapter 4 – Translation as Knowledge Production: *Where There Is No Doctor* in Tamil

Note: The text of this chapter is included here in manuscript form, as it was submitted to a journal for review.

Title

Translation as Knowledge Production: *Where There Is No Doctor* in Tamil

Abstract

This paper responds to the call to build a consciously postcolonial STS, which must engage with the movement and production of knowledge across difference, and specifically across language. *Where There Is No Doctor* is one of the most widely used community health book in the world and has been translated into over 80 languages. I argue that the translation and adaptation of *Where There Is No Doctor* and the books it inspired have opened space for translators, clinicians, and villagers to create and circulate new health knowledges. Focusing on Tamil-language translations, this paper traces three aspects of translation, and the health knowledges produced in the process. First is the effort to find language that is comprehensible, and that will make understanding possible. Second is the effort to find language that will create opportunities for the reader to act in new ways, to motivate them to take new and different actions. The relative success of these efforts is then assessed by gathering feedback from readers to improve comprehensibility and motivation. The third aspect of health knowledge production comes after publication, in the circulation of new vocabulary with and beyond the books. Taking these pieces together in a postcolonial STS frame, I argue that the collaborative knowledges produced in these translations are new. I provincialize the American English editions of the books, centering Tamil translations and the production of new knowledges in the writing of these texts.

Introduction

Sadhiq and Nisa are a husband and wife who run a small printing press in Tamil Nadu, India. Their catalogue includes the current Tamil edition of the 1973 international best-selling community health book *Where There Is No Doctor.* Sadhiq became a publisher after training as a pharmacist; Nisa trained as a nurse and assists with translating publications related to health. The two collaborated to translate *Where There Is No Doctor* into *Doctor Illaadha Idaththil* for use by Tamil-speaking villagers, community health workers, and clinicians. In a joint interview, they describe how they developed new language during the translation process:

> Nisa: 'Edema' does not have a word in Tamil. It is a collection of liquid in one particular part of your body. People were always calling it 'swelling'. How can you call it a 'swelling'? You can't. It's wrong. And you will give a wrong thing. The person will say he doesn't have any swelling. He doesn't know it's edema. So, we thought about a word called '*neerveekkam'*, that is 'water logging'. In one of your body parts. We basically picturized things, animated it and brought out our [own word].
>
> Sadhiq: It's people's language.
>
> Nisa: Colloquial words. Which you can just polish and make it a textbook word.
>
> Sadhiq: There are so many words –
>
> Nisa: Words which are commonly used by common people. These words will stay in a village health nurse's mind. Even if she's read the book once, she will know somebody with kidney failure who is progressing will have… '*neerveekkam*'. So she will know 'water logging'. So yes, must send this person to the Primary Health Care Centre.

Around the world, global health workers try to achieve what Nisa imagines: a villager knowing when to seek care, and a nurse knowing when to refer that patient to more advanced care. However, they rarely rely on the ability of a villager to understand their own body, or of a rural clinician to understand the promise and limits of modern biomedicine. Sadhiq and Nisa address the villager and health worker directly, and in the process, create new vocabulary that produce new understandings and actions.

I argue that the translation and adaptation of *Where There Is No Doctor* and the books it inspired have opened space for translators, clinicians, and villagers to create and circulate new health knowledges. In this manuscript, I trace ways in which translation creates new understandings, new actions, and new language in this empirical setting. These new understandings, actions, and language are not just new to the reader – providing a rural Tamilian nurse and her patient with information that someone else already had access to – but rather had not yet been constructed in the world before this translation effort produced them. This analysis situates the production of these translated Tamilian health books as a profound instance of knowledge production at multiple levels: for and by the translator, with the eventual readers and users, and for the development of the Tamil language itself.

This paper analyzes three aspects of translation from the perspective of the translators, and the health knowledges produced in each. The first is the effort to find language that is comprehensible, that will make understanding possible. Second is the effort to find language that will create opportunities for the reader to act in new ways, to motivate them to take new and different actions. The relative success of these efforts are then assessed by gathering feedback from readers to improve comprehensibility and motivation. The third aspect of health knowledge production comes after publication, in the circulation of new vocabulary with and beyond the books. These aspects of the translation process and the creation of new knowledge can be mapped to one another. The effort to create comprehensible material leads to the creation of new understanding, initially for and by the translators. The effort to create motivational material leads to the creation of new actions and knowledge, by the eventual readers and users. And the effort to circulate new language is both based on the creation of new vocabulary and impacts the development of the Tamil language.

This paper responds to the call to build a postcolonial science and technology (STS) studies (Anderson 2014; Anderson and Adams 2007; Clarke et al. 2010), which must engage with the movement and production of knowledge across difference, and across language. A postcolonial STS examines former colonies and colonizers in the same space, analyzing the ways in which science and health knowledges connect and disrupt local and global networks, as well as the supposed distance between the two. Specifically, I engage situational analysis (SA) as a de-colonizing methodology to take seriously the books as objects, and to build on critiques of Actor Network Theory as flattening power dynamics. Paired with this, I draw on postcolonial translation studies from the cultural turn. Prasad (2016) argues that postcolonial STS, "by the very act of showing the multiplicity, contingency, and context-dependence of scientific knowledge and practice, provincialized modern science." Building on this work, and responding to Chakrabarty's (2000) call to provincialize Europe, I de-center the American English books, focusing on Tamil publications and the production of new knowledges in the writing of these texts. To do this, I build on the field of translation studies to analyze the production of knowledges in the Tamil translation of *Where There Is No Doctor* and its companion books.

Tamil translations make an excellent case study for this paper from both a linguistic and health perspective. Tamil dates from the 5th century BCE; it is the official language of the southern state of Tamil Nadu, and is spoken by more than 66 million people around the world (Krishnamurti 2011). There is great pride in Tamil language and literature, which has been maintained through colonial rule and the designation of Hindi and English as the official languages of the government of India. Starting in 1984, there have been multiple Tamil translations of *Where There Is No Doctor* and related books, many of which remain in circulation. While the Tamil language makes an excellent 'ideal' case language, and the rich

history of both community-based and government health programs in the state of Tamil Nadu make it an excellent location for examining the production of health knowledges, these books present more of an exception than a norm among widely translated works. *Where There Is No Doctor* and its companion books are books that are meant to be used – to be read, and then to allow the reader to set down the book and take specific actions for their own health, and the health of those around them.

The paper begins with a brief background on *Where There Is No Doctor* and related books, focusing on their translation into Indian languages, followed by a theory-methods framing of the sociology of knowledges produced in translation. Next, I explore the ways in which the book's Tamil translators construct health knowledges through the creation and testing of language intended to be comprehensible and to motivate readers to act for their health and the health of others. This leads to a discussion of how this language enters wider vocabulary and thus contributes to the way future readers understand their health and the health of their communities. I argue that this process of translation, and of creating language understood as comprehensible and motivational, is an example of knowledge creation – not a creation of equivalence, but the production of something new across difference. Far from representing the same text in another alphabet, these translations represent new forms of knowledge, making new forms of language and action possible.

Background

Donde No Hay Doctor was published in 1973 based on the combined efforts of American volunteers and Mexican community health workers, inspired by Paulo Freire's (Freire 1970) pedagogy of popular education. It was translated into English as *Where There Is No Doctor* in

1977, and Hesperian Health Guides was established as a non-profit publisher in California to distribute the book. Using an open-copyright model, translation and adaptation of the book were encouraged, and the book, as well as excerpted images and ideas from the text, traveled quickly around the world from Zimbabwe to Antarctica (Hesperian 2013). Since the publication of *Where There Is No Doctor*, Hesperian has published eleven additional community health books, which have been translated and adapted by groups around the world.

Where There Is No Doctor was first adapted for India in 1980 by the Voluntary Health Association of India (VHAI), a national non-profit that distributed the book throughout the country. With re-drawn illustrations to show men and women in Indian clothing, and examples of herbs and generic and brand names of drugs, VHAI's English-language Indian adaptation was quickly taken up by groups training community health workers. However, to reach Indians across different states and language groups[40], translators emphasized that having a book available in the colonial language would not be sufficient; it must be available in regional languages that many people understand more intuitively. The book has since been translated into eight major Indian languages by both VHAI and other organizations. *Where There Is No Doctor* was first published in Tamil in 1984 and remains in print.

The book is written for low-literacy audiences and heavily illustrated with the hope that an illiterate villager could find the information useful if it were read aloud by a community health worker or neighbor with a few years of formal education. The back cover of the American English edition (Werner et al. 2009) states that the book is for villagers, village storekeepers and pharmacists, teachers, village health workers, and mothers and midwives. To the villager, the

[40] Twenty-two languages are officially recognized in the Indian constitution, and hundreds of additional languages are spoken throughout the country (Census of India 2011).

book “explains in simple words and drawings what he can do to prevent, recognize, and treat many common sicknesses.” For the village health worker, the book “discusses ways to determine needs, share knowledge, and involve the community in activities that can better people’s health”. The English-for-India edition (Werner and Sathyamala 2014) has the same words on its back cover, with a recent addendum announcing updated content and that “community action continues to be emphasized throughout the book along with traditional forms of healing.” These ideas travel with the book, across continents, languages, and time, with a focus on sharing knowledge, and on acting on both individual and community levels. As they travel, the books are translated and adapted, creating health knowledges that shape the lives of people around the world.

In global health, the ‘global’ text or practice is generally treated as hegemonic and produced in the European or American core and distributed as a solution, while ‘local’ adaptations or indigenous versions of a similar text or practice stay on the periphery. The theoretical tools of a post-colonial sociology of health knowledges produced in translation, described below, take the translated object – in this case, Tamil language books – just as seriously as the internationally-used American English edition. The analytic importance of this step is underscored by the empirical history of the book. The American English edition functions as an intermediary form that travels post-colonial tracks to connect community health workers in the mountains of Mexico (where the original book was written, in the Spanish of the colonists), through the settler colony of the US to post-independence India and the state of Tamil Nadu. This intermediary version allows people across Tamil Nadu to learn from mountain villagers in Mexico, in a process that reflects Tsing’s (2005) concept of global *friction*: neither a clash of civilizations, nor a smooth and uninterrupted flow of knowledge around the world, but rather a

series of interactions between variously situated actors that produces and re-arranges the social world. The American English edition as intermediary does not travel because it is universal or not-local; it travels because of the histories of colonialism that resulted in English being the dominant language in the United States, as well as widely spoken, especially by the upper classes, in India. Taking this into account when centering the translated book allows us to analytically *provincialize* the American edition, following Chakrabarty (2000), while recognizing the heterogeneity of language use within India.

Theory-Methods

This analysis builds a sociology of health knowledges produced in translation and contributes to debates about the creation and travels of different kinds of knowledge. Translation studies has emerged over the past half century (Gambier and van Doorslaer 2010) at the juncture of literature, history, cultural studies, and social sciences. The sociology of translation, a subfield[41], has emerged in the past two decades (Wolf and Fukari 2007), focused on analysis of social action of written and verbal translation. Much of the work in this subfield has focused on dynamics of international book markets, hierarchy of languages, and identity of translators, and does not provide sufficient analytic leverage for conducting the micro-level investigation of language choice and creation this paper engages. However, one branch of sociology of translation provides part of this needed leverage: Latour's (2007) Actor-Network Theory (ANT) allows us to take seriously books as non-human actors, and to trace their ongoing production (Buzelin 2007). ANT was originated by Latour to argue against previous approaches that did not

[41] Sociology of translation can be understood as a broad field investigating the concept of translation. This paper focuses on sociology of translation as a sub-field of translation studies, focused on written and verbal translation of language.

account for the role of non-humans and the social worlds created around, with, and through them. To do so, Latour advocated for an approach that identifies non-human as well as human actors and lays out the network of relationships between them. Engaging an ANT analysis for this project centers the books, focusing on stabilization created through the network, and the objects' immutability as they travel.

However, these books specifically invite change, and travel because they are indeed mutable. I therefore extend an ANT treatment of translation by taking up situational analysis (Clarke, Friese, and Washburn 2017) to engage in a sociology of translation using a post-modern, constructivist, and (post)colonial/decolonizing method (Clarke 2016b, 2016a). While ANT has been critiqued for its tendency to flatten social structures and limit analyses of power (Star 1990), SA enables us to build a social constructivist, symbolic interactionist analysis of human and non-human objects, and examine their change and movement as they travel. SA is a theory-methods package that builds on a postmodern interpretation of grounded theory. It was developed by Clarke based on the epistemological stance that nothing is outside of the situation, and that all research is contingent, constructed, and processual. Reviewing ways in which SA has been taken up in explicitly post-colonial and decolonizing research, Clarke (Clarke 2016b) argues that SA is a (post)colonial/decolonizing approach first and foremost because it is "relentlessly empirical." It aids an analysis of social distances and power differentials, examining the production and movement of knowledges produced by and between community health workers, professional publishers, parents, teachers, doctors, social workers, and more. Specifically, SA provides both a set of analytic tools, including framing and data collection techniques, as well as mapping processes to analyze data, based in a theoretical commitment to engaging the multiplicity and power dynamics in any situation. As the name implies, it is

concerned with everything in the situation, rather than framing some aspects as 'context' for an imagined core. Taking narrative, visual, and historical discourses into account, it provides tools for analyzing power, as well as the diversity of knowledges. Concepts such as implicated actors help to point to those who are assumed not to have agency but are silenced and constructed by others. Finally, it embraces the messiness of life and research, while connecting individual experiences to the larger social structures that inform them, and vice versa. This set of tools helps focus on the empirical postcolonial situation of these translated and adapted books, and the social worlds that they form, and which inform their travels. By looking critically at power relations, and not placing some actors and actions as 'context' for others, but taking all implicated actors into account, SA provides the analytic leverage to engage translation from a postcolonial perspective.

Additionally, SA facilitates the re-integration of post-colonial translation studies, which emerged during the 1990's cultural turn in translation studies (Gambier and van Doorslaer 2010) and other fields (Clarke et al. 2017), and is crucial for a sociology of translation of a book like *Where There Is No Doctor*, which traveled with, across, and despite colonial agents. In *Provincializing Europe*, Chakrabarty (2000) draws on a series of definitions stemming from the cultural turn of postcolonial translations studies. These definitions, in contrast with some literary definitions of translations as creating equivalence, center around what Morris (1997) describes as "a conception of translation as a practice producing difference out of incommensurability (rather than equivalence out of difference)." This conception is based on Sakai's (1997, 2006) argument that

> Through the translator's labor, the incommensurable differences that call for the translator's service in the first place are negotiated… In this respect translation is like other social practices; translation makes something representable out of an

unrepresentable difference.

As Sakai and his colleagues point out, translation produces a new representation that was not previously conceived as possible. One concrete example of this is contained in the exchange that opened this paper, and explored further below: Nisa and Sadhiq, while translating, chose not to use the previously-used word 'swelling' but rather created a new word for 'edema' that they hope will create a new kind of understanding and action.

This paper draws on data collected during 2013-2016, including 59 interviews with participants involved in the translation, adaptation, distribution, and use of books published by Hesperian Health Guides[42], most notably the book *Where There Is No Doctor*, into Tamil, Kannada, Hindi, and English, for use in India. Participants are medical doctors, public health professionals, ministers, journalists, social workers, and publishers. Relevant interviews were transcribed, reviewed, and coded. Participants gave their informed consent to be interviewed and are referred to by their names or pseudonyms, depending on their preference. In addition, I conducted observations of publishers and community health worker trainings and work, and gathered written materials, including translations and adaptations of the books themselves, as well as drafts in progress and related writing on community health workers and the role of lay knowledge in health. Before, during, and after data analysis, I created a series of situational and relational maps to explore the variety of actors and forces in the situation, and the ways in which they influence one another, as well positional maps to analyze the range of positions taken and not taken by participants (Clarke et al. 2017). This paper focuses on data related to the translation

[42] I was employed by Hesperian for five years; memos from these periods include reflexivity about my roles.

of Tamil editions of these books.

Findings: Translation as New Knowledge

The social process the translators engage in to translate and produce health knowledge for an instrumental end – creating changes in individual and community health – include three aspects of knowledge production, each influencing the others. First, the translators emphasize using and creating words that the imagined readers will be able to comprehend in a way that creates new understandings of health, bodies, and communities. Language construction here is about comprehensibility in the sense of making the body knowable and able to be intervened on across significant social distance – class, caste, education, and literacy. The effort to reach across those hierarchies in turn shapes the production of new knowledges capable of speaking across difference. Second, and particularly important for a book about health and illness, there is an emphasis on language that motivates people to act. Translators encourage their future readers to act for themselves and for their children, neighbors, and patients, and eventually, to change the conditions that create or impede health. These books are rarely read by one person, and each interaction represents a different knowledge produced. Next, these values of comprehensibility and motivation are tested by sharing materials with people similar to the intended audience. Here, the knowledge production process moves explicitly beyond official translators, and is actively engaged in creating difference (rather than equivalence) out of incommensurability by both valuing and depending on the knowledge of those with less formal education. Third, translators codify new vocabulary created in this social process through glossaries and hope the language they create will become part of medical and health vocabulary. The fact that comprehensibility and motivation are the aspects of language that translators point to again and

again, as they test materials and disseminate new vocabulary, demonstrates that those values – the same ones quoted from the back of *Where There Is No Doctor* – effectively travel with the book and are continually re-instituted and re-created in the translation and adaption process. This process of translation in turn produces fundamentally new knowledges.

Comprehensibility: Language should be simple enough for everyone

Language used in and created for these books must be something that the reader – the community health workers and parents addressed on the back of the book – will understand. While some people using the book have formal health training, it is written to be read by anyone with basic literacy, and to be understood by illiterate listeners. The translators are highly educated people who know that the way they read, speak, and listen may be very different from the imagined audience they are committed to reaching. They address this distance in two related ways: by focusing on *functional*, as opposed to *literal*, translation, and by distinguishing between 'high' Tamil and the kind of language people speak every day.

The first mechanism translators use to address the distance between themselves and their readers is by focusing on what one translator describes as *functional* translation. Saulina translated the 1998 Tamil edition of *Where There Is No Doctor* for the state affiliate of VHAI; this involved both updating an earlier Tamil edition and translating the updated English-for-India book. In her words, *functional* translation "means it is something that people can understand. Some of the words we had to adapt, to make sure that people understood the functional terms. We are not going to be there when they are reading it, so it should be self-explanatory." Her immediate concern, as a translator, is that when the reader picks up the book, they should be able to understand the words on the page without further explanation. She also demonstrates the

difference between what Morris refers to as creating equivalence from difference (related to Saulina's comparison to literal translation) and what Saulina focuses on here, creating difference out of incommensurability through functional translation. A literal translation would attempt to create equivalence from the difference between a mono-lingual Tamil speaker and the English-language page. Saulina's functional translation aims to create difference out of incommensurability; recognizing the incommensurability of experience between writer, translator, reader, clinician, and patient, and using language that acknowledges and attempts to bridge that distance.

Saulina's concern about creating a functional translation also reflects the social stratification of society. As a highly literate woman, she is capable of reading and translating from English to Tamil but must ensure that the Tamil vocabulary she chooses will be understood by people with much less formal education. This interest in providing a functional translation is in turn reflected in the second mechanism for addressing this social distance, using 'low' rather than 'high' Tamil. In interviews, Tamil translators frequently mentioned widespread pride in Tamil literature and language. They also discussed the distinction between 'high Tamil,' as it is used in formal writing, and 'low Tamil', as it is spoken colloquially. Ramakrishnan, who published the first Tamil edition of *Where There Is No Doctor* in 1984, talks about the pressure to use high Tamil vocabulary, and his counter-insistence on using language that most people will understand:

> We are totally against that kind of high style puritanical approach. In using Tamil words, very often we used what an illiterate person would use in a village. For example, a woman in a remote village, she may not know the word we use. So we used terms which people were using because it is communication which is important; the language should be simple enough for everyone.

As an educated man and professional publisher, Ramakrishnan speaks both fluent English and a different style of Tamil from "a woman in a remote village." However, he distinguishes himself from "puritanical" writers and publishers primarily concerned with maintaining high Tamil as the standard for publication. He positions himself instead as someone able to act as a bridge – capable of translating a six-hundred-page book, but also able and willing to use vocabulary that illiterate people would understand.

Engaging in functional translation and using low Tamil vocabulary are both mechanisms that increase the comprehensibility of the translation. For books intended to reach a village audience, comprehensibility starts before literacy. The words in these books are not just for someone to read, but words for an illiterate person to hear. The knowledge that will be created between the reader and listener must inform the kind of knowledge produced by the translator for their imagined reader; the translator is writing for the community health worker who reads the book aloud, as well as the listening parent. Each level of difference – of class, caste, education, and literacy, between the translator and the reader, and the reader and the listener – is taken into account and influences the production of knowledge intended to speak across literacy. SA provides a focus on construction and role of these social distances, as well as the importance of implicated actors, such as illiterate listeners, in the production of knowledge. These texts are designed to be not just comprehended but acted on. The next section will explore this dynamic, and the process of creating words intended to motivate the reader or listener to set down the text and do something.

Motivation: Make people run

The language chosen and created in these translations must be comprehensible, and it must motivate people to act. Translators conceived of language as motivating action and instigating appropriate behaviors both in relation to the formal healthcare system, and within the community. In the exchange at the beginning of this paper, Nisa and Sadhiq spoke of creating a new Tamil word for 'edema' that people will understand – not just in a literal sense, but in a clinical sense. When they see fluid accumulating under the skin, they will connect that to a serious medical condition, and will seek care. Such creation of new language is a clear empirical example of the production of new knowledge. In another example, Nisa recounted their creation of another new word, this time for stroke:

> [There] was 'heart attack' … we wanted the common man to give the same importance to 'stroke', which was not happening. Heart attack, everybody was scared. Why not 'brain attack'? So we changed 'stroke' in Tamil. You know, there is no scare in that word, in Tamil. So, then we made it a scary word. It became '*moolaiththaakku*.' That's how we could… make people run if you have a stroke — which, if you reach the hospital in time, can be stopped or reverted, depending upon what type of stroke it is.

In this and the edema example, Nisa described educating people about the importance of seeking further care, motivating the reader to take immediate action. She wants people to be afraid of strokes, to rush to the hospital, knowing that if they arrive in time the damage can be controlled. Rather than using the previous Tamil term for stroke (*pakkavaatham*), Nisa and Sadhiq create a new word to inspire a new understanding and reaction, just as they rejected the use of existing words for swelling used to describe edema (*neerkovai* or *mulankaal veekkam*) in favor of *neerveekkam*. This creation of a new word to impel a specific reaction, when a word for that condition already existed, demonstrates the ways in which the values displayed on the back of the book – sharing knowledge and empowering people to act – travel with the book, and are both

reproduced and produce new knowledges through translation. A new kind of knowledge is being produced, informed by Nisa's background as a nurse and her husband Sadhiq's education as a pharmacist, their overlapping language fluencies in English and Tamil, and their experiences as publishers. It is not new in the sense of the concept of 'stroke' being expressed in Tamil – Tamil phrases to express and respond to that experience presumably existed in Siddha medicine[43], and the biomedical concept likely entered Tamil vocabulary with the arrival of British colonists. However, those words had to be learned as vocabulary, then have the action assigned to them. In contrast, this new vocabulary was created in the hopes of motivating a built-in response – to 'make people run.'

The next example I offer describes action on a different scale, outside of the clinic, and in the realm of community action to support a child with disabilities. *Helping Children Who Are Blind* was co-authored by Namita Jacob, a Tamilian woman; she later oversaw translation and adaptation efforts in India. Namita described seeing how parents would act upon receiving the Tamil translation:

> If a parent is motivated, then it doesn't matter whether she is literate or not, it doesn't matter that she doesn't read, she will get someone who does… I just give [the book] to the parent and we see what happens. And everywhere, this was immediate, they would take it, they would put it down and they would spread it out, make it flat and then they would call for not one, but all the literate people and they'd all come around and sit.

Namita goes on to tell the story of visiting a village where a child had been identified by the National Association for the Blind but had not yet started getting support. When she showed the family the book, the child's grandfather read it aloud, "and meanwhile the village school teacher showed up and just listened." Afterwards, the teacher insisted that the blind child "attend school

[43] A system of traditional medicine that originated in South India.

every day, and that they send him with the book. And after class, when all the other children were sent back, [the teacher] would read the book, and he would practice with the child." In this small village, Namita's visit was a notable event, and the teacher came by to see what was happening; when he heard the grandfather reading out methods for teaching blind children, he realized he could use the book as a resource to learn and teach.

This ceremonial group reading was something Namita witnessed repeatedly, and associates with a successful translation – one that draws people together, and compels them to act, both to read and listen together, and to put into practice what was learned. This pattern of reading, listening, and action tell Namita she has done an effective job putting the book in language that can be understood and will be acted on. Here, SA engages everything in the situation; analytically, it is important that the resulting actions are not just context or downstream effects of the initial knowledge production of creating a comprehensible text, but are part of both the translation process itself, and the knowledges produced as the book is read, heard, and used. Namita also sees the uptake of the book as a community process: not one person reading, but a group of people gathered, so that the parents are learning, even if they are illiterate, and neighbors, teachers, and others learn collectively to support a blind child to learn and grow. These books are often read aloud, discussed, and used in different ways by different people. Each interaction – a community health worker reading to a women's group, a teacher reading late at night and planning the next day's lesson – represents a different knowledge produced, a different reaction created in the world.

Gathering feedback: And then I would change it

The processes of selecting and creating vocabulary to be comprehensible and motivational works best when done in collaboration with future readers. The translators know their perceptions of what intended readers will and will not understand may not be accurate and rely on people with less formal education for feedback. This process depends on and replicates social hierarchies, as domestic employees, recipients of non-profit services, and community health workers of lower caste and class are asked to provide additional labor in the form of feedback. However, this process also recognizes the distinct value of the knowledge that people with less formal education carry, including them in the translation process. Laying out these actors in a way that pays attention to the power differentials between them facilitates analyses of how these processes both reinforce and undermine hierarchical productions of knowledge.

Having tried to create a functional translation, using low rather than high Tamil vocabulary, the translators look for proxies for their audiences and gather feedback to assess the comprehensibility of their translation. Saulina took an institutional approach, sending out small portions of translated material in her non-profit's newsletter for health workers, along with a short quiz, and gathered their responses. This simple method of field testing allowed her to assess whether her core audience for the translated book – health workers across Tamil Nadu – could read and comprehend the material in her absence. At this level, she was gathering feedback on the comprehensibility of her translation. Saulina, as the executive director of a state-wide branch of a national non-profit, had networks of community health workers in the field – women who were literate, with some health training, but worked frequently with illiterate women.

The translation process of *Helping Children Who Are Blind* provides examples of gathering less formal feedback. A professional translator completed an initial Tamil translation.

Next, the text was edited by a team of volunteers led by Namita. One of the volunteers was a woman I will call Seetha Raman, who spent years recording and transcribing papers, books, and magazines for blind students. The role of the volunteers was to bring down the level of language, from the high Tamil it had been translated in, to words anyone might understand. The translation team broke up long sentences into shorter ones. They used words that were common, such as *appa* for father, rather than the formal Tamil *thandai*. Seetha describes the way she gathered informal feedback about language choice:

> Every word we went through with different people. And the finished product I read out to as many people as I could... I have staff, this lady who cleans the house, another lady who helps me to cook, and as they were cleaning the house I would read out to them and say what do you understand or what do you not understand... And they would say 'I don't understand this word' and then I would change it. We simplified it so that people could understand it.

Seetha asked her house staff, who are from caste, class, and educational backgrounds closer to the imagined reader, to assess what language might be best understood. In doing this, she was drawing on the unique knowledge of the women who worked for her; their labor was being relied on twice over, as domestic workers, and as a sounding board for translation and language choice. This pattern both replicates colonial power dynamics on a small scale, while also undermining them; the knowledge production process draws on and values the knowledge of these lower caste women, but simultaneously demonstrates the distance between the translators and the people they hope to reach.

Namita, who has extensive experience working with communities to support children with disabilities, took Seetha's informal feedback-gathering to another level:

> I live on [a university campus], we have a servants' quarters behind us. Many of the women, their children go to school but they themselves dropped out [after] third grade and fifth grade and so on. And I would have them proofread the Tamil and explain to me

> what needs to happen with the child. This was the way we made sure the language was ok.

She asked the women who lived and worked as servants in her building to read the pages and describe to her what they would do next, essentially testing whether the first step of translation – comprehension – would lead to the second – motivation. The women's knowledge and understanding were relied upon, but they were elicited across a heavily asymmetrical power dynamic. This mirrors the dynamic described above, simultaneously drawing on and ascribing value to the knowledge of women with less formal education, while re-inscribing the distance between the translator and their imagined readers.

Each translator uses the audience they have access to that best approximates the audience they are hoping to reach – caregivers of young children in the case of *Helping Children Who Are Blind*, and community health workers for *Where There Is No Doctor*. Those who give feedback become part of the translation process, integral to creating a comprehensible and motivational text, and allowing translators to reach across social distance to imagined readers with little, if any, formal education[44]. Translation here simultaneously replicates and undermines hierarchies of knowledge production, but it also allows these texts to travel, from Mexico, through the US, to non-profits run by medical, social work, and publishing professionals in India, and on to community health workers, teachers, and individuals and communities. The way that the books are adapted and edited, based on a recognition of the distance between readers and writers and listeners in vastly different places and lives, facilitates its travel across social distances within and between distant locations. Here, SA and a post-colonial STS of translation engages the hierarchies and distances between the many social locations through which the book travels, as

[44] Hesperian Health Guides has its own formalized field testing process; some of the Tamil translators had taken part in this, and others may have been influenced by it less directly.

well as the changes that keep the text moving.

Codifying vocabulary: A contribution to the language

Taking these ideas of comprehensibility and motivation together, the social process of creating new vocabulary in translation often results in the circulation of new phrases. On one level, this spread of new vocabulary is a functional, instrumental move, creating new vocabulary where previous language is perceived as insufficiently comprehensible and motivational. It is also a demonstration of the relationship between language and knowledge. Examining translation demonstrates the ways in which language codifies knowledge and allows it to travel and to act on the world. The process happens organically, through use of the books, but it can be traced through publishing houses that printed the first and third iterations of Tamil *Where There Is No Doctor.* First, translators create new language, as Sadhiq and Nisa describe above, and as Ramakrishnan describes below. Then, they use it consistently in their own writing, creating internal lists and published glossaries. Over time the language circulates with the books, and hopefully, past them.

Ramakrishnan, who published the 1984 edition, describes what makes language in these books valuable and drives the creation of new vocabulary, reflecting views quoted earlier.

> It is also a contribution to the language because many of the concepts that we have discussed in *Where There is No Doctor* had not been properly expressed in Tamil until that. When we looked around we found that there are eleven terms in Tamil for dehydration, none of them was scientifically accurate or simple or communicative. If you are introducing a word or a concept, it must be simple to understand, it must be easy to communicate, and it must be scientifically sound. In the process we introduced a set of terms which today have become common language, like dehydration or suppository or antibiotic or diaper.

He is concerned that words point to a specific meaning. Since none of the existing words fit his criteria, he coined *nirizappu*, or 'loss of water'. There may be words currently in the language – in this case, many terms for dehydration, as well as 'swelling' for edema and a literal translation of 'stroke'. However, Ramakrishnan reflects Nisa's concerns that the words in this text should generate what he sees as the right kind of understanding in people. This creation of vocabulary is a profound instance of knowledge production. A literal translation might take up the most common of the previously used words, but this functional, low-Tamil translation produces a new word intended to communicate a new kind of understanding.

As new vocabulary is created, it becomes codified. The first level at which this happens is in internal lists created by and for the translators. Sadhiq founded his press in 1998. He considers Ramakrishnan one of his gurus and took up translating *Where There Is No Doctor* when the previous edition had become outdated and unavailable. Sadhiq and Nisa, who describe coining new words for 'edema' and 'stroke', have created their own glossary of codified language. Nisa describes their internal list as a "data bank that we have made." Over time it became second nature to them, to a point where they no longer look words up, but are implementing a standardized set of vocabulary across publications. The second level of codification happens in the published books. To maximize reader's comprehension of the first Tamil translation, Ramakrishnan added a two-way language glossary at the back of the book. The reader, he explains, may "know an English term but may not know the Tamil term. Everything would be in Tamil, so we had a two-way glossary, Tamil-English, English-Tamil." The two-way glossary, included in the current edition, makes the book comprehensible to a wider audience, as readers have overlapping but varied English and Tamil vocabularies. This acknowledgment of the multi-lingual nature of Indian education and medical pluralism that mark

India's pronounced heterogeneity is an example of the kind of knowledges that Sakai (1997) and colleagues see produced in translation, creating difference rather than equivalence out of incommensurability. It acknowledges the diversity of Tamil readers who will pick up the book – that for some Tamil will be their first language, for others their second or third, and that they may have been educated in Tamil, English, both, or neither. It undermines the idea of thinking about translation as replacing one phrase with another and imagining that will create the same reaction in a different place. It is also an example of how change allows the book to travel. The need for the glossary reflects the heterogeneity of readers, as well as the translator's acknowledgment of the variety of knowledges leveraged and produced in the translation, reading, and use of the book.

The published glossary, reprinted and edited many times between the 1984 and 2013 editions, becomes part of the circulation of this vocabulary as new knowledge. Approximately 60,000 copies of Tamil translations of *Where There Is No Doctor* have been distributed. Ramakrishnan's press is well-known for their Tamil dictionary, and his commitment to and pride in his role as someone who maintains and builds Tamil language and literature is strong. He sees his work in *Where There Is No Doctor* as a "contribution to the language," and reports seeing the vocabulary used in that book spread since its publication in 1984. He saw terms he coined, including *anaiyaatai* for diaper and *utkaraikkulikai* for suppository, used later in popular writing on health. As Sadhiq and Nisa describe creating new language for 'edema' and 'stroke', and in taking "people's language" and polishing it, they feel this new vocabulary is being taken up and used. They began publishing the book in 2011, so at this point the language is unlikely to have spread in the way Ramakrishnan describes his terms becoming part of colloquial Tamil. Yet they seem hopeful of having a similar impact.

From Ramakrishnan's work in the 1980's through the most recent edition of *Where There Is No Doctor*, these translators are creating and circulating vocabulary – not to translate something that has never been translated, but to communicate a specific idea about health that will produce new possibilities for action. They seek to motivate people to read and listen, and to put down the book to mix oral rehydration salts for a child dehydrated from diarrhea, to encourage their father to seek advanced care, or to send a blind child to school. New vocabulary is created, not to name the un-named but to describe it in a way that is simultaneously comprehensible and motivating. Next it is codified in internal and published glossaries, and spreads with the books. Like many other Indian language editions, these cross borders; notably to Sri Lankan Tamilians, who often lacked access to health care before, during, and after the civil war. It is important to provincialize not only the American English edition, but the English for India edition as well, and to center the travels of each language edition; a postcolonial sociology of translation and SA aid in this. These translated forms of health knowledge are not bound by or defining of a nationality or a specific medical setting (Sakai 2006). They are constantly created and creating, in updated language, in new languages, and creating new language.

Conclusion

The process described here is a social one of creating new health knowledges through translation – not just on the page, but at the level of spoken language and moving bodies. From Namita's team of volunteers to Ramakrishnan's team of editors, no part of these books is written by one person. As drafts are written, words are uttered, mailed, tested in interactions with parents, community health workers, and maids doing double duty. The experiences, opinions,

and resulting actions of these people are then integrated back into the text, changing the vocabulary and meanings that will be generated by future readers and listeners. Without this depth and variety of input, the manuscript would remain as translated by one academic – a *literal* translation with long sentences and high-level language. It would not be a *functional* translation and would not carry the ideas embedded in the original Spanish, or the intermediate American and Indian English editions. A postcolonial STS provides an important frame for analyzing this as a social process of knowledge production; knowledge produced across incommensurability, creating something new.

At the center of this arena of health, community, and texts are the translators and their imagined readers: community health workers, mothers, teachers, each addressing individual and community health. The distance between these actors and their written and spoken words allows the creation of new and different health knowledges. One important aspect of this difference is the way that it both draws on and values the experience of women with limited education, while reifying their distance from the translators and publishers hoping to communicate with them. It relies on the labor of these women, but always filtered through the understanding of those with more education and power. Of course, knowledge is always-already produced across hierarchies, with little concern for those on the bottom. Here, the active effort to reflect the experiences of the subaltern is an important reflection of the Freirean values of the books. However, it is never complete. During the exchange, the women are not given, for example, the education to then write such materials themselves.

Nisa and Sadhiq create language to encourage individuals and healthcare providers to intervene on bodies. For Namita, this intervention extends to the social networks around individuals. In the process of creating and popularizing language that readers will understand and

act on, new vocabulary is created and circulates. At first carried in the minds of the translators and internal lists, then in a glossary in the printed book, and later by readers, listeners, patients, and caregivers, these words instantiate the ideals of comprehension and motivation described on the back cover. A sociology of translation focused on the macro-level social processes would engage these interactions on their own terms; a sociology of translation that employs ANT adds in the books as actants but flattens the power relations across which they are produced and travel. By engaging postcolonial STS and situational analysis, this analysis tracks not only the social relationships between books, translators, and readers, but both the friction with which these travel, and the new knowledges created in this process. By provincializing the American English edition and centering Tamil translations, the social process of creating new health knowledges through translation is brought forward.

What is translated in these books is a set of ideas. Translators emphasize that direct language translation would not fulfill the purpose of the books because language varies across culture, class, caste and education. In the incommensurability between the life experiences and languages of imagined audiences and translators sitting with texts and proxy readers and listeners, difference is constructed through translation and knowledge is produced; a knowledge that will only be successful if it is propagated through the actions of people who respond to the instructions and use the altered language. The fact that translators focus on this social process, and the readers who will pick up the book and care for their child, neighbor, or patient, shows the success of the books as a way for those ideas about health to travel. This is a story about books that have traveled the world, picked up by individuals and communities, translated, carried, become dog-eared with use, left on a shelf, reprinted, redrawn, and now digitized. It provides an important case study about the kind of knowledge in the books, and how it moves. It is the kind

of knowledge that is meant to demystify biomedicine, so that it can be used, and its dangers understood, and to demystify the body, so it can be cared for. It is meant to speak to readers where they are, to be immediately useful, and to give people the tools they need to set down the book and act.

Chapter 5 – Conclusion: It's everybody's own body, so they should know about it

Tracing *Where There Is No Doctor* as an object of analysis, I spoke with people who have translated and adapted the book about how it travels, and what it means to them. Dr. Ravi Narayan, who has helped to train and mentor generations of community health workers and organizers, described the text and its impact this way:

> This book was path breaking. It came from people's experience. It came in response to a real need. The way it got translated, it got written, made it [travel] across so many different cultures…when we did a two-year Community Health program, we gave [the participants] a Hindi book of *Where There is No Doctor*. Many of them cherish [it] because when they are working in remote areas people come to them with complaints for which they really don't know [the treatment], so they refer to this book. And I have heard other people who work in remote areas use this as a Bible. [It's part of] that stream of thinking of demystifying, so that people can take control over some of the knowledge that's there. It's breaking the knowledge hegemony. Otherwise the medical professions have always jealously guarded their turf. After all, it's everybody's own body. So they should know about it.

Dr. Narayan's sentiments – that the book speaks to people's needs and gives them knowledge to act on their own bodies, to take care of their communities, and that it is thought of with the reverence and frequency accorded to a Bible – were expressed repeatedly by participants in my research. Others described it as a dictionary. In either case, *Where There Is No Doctor* serves as a catalog of stories, definitions, and simple explanations of complex ideas for people thinking and working within the framework of community health. It also serves as an icon or an identifier of those ideas: that everyone should both have access to care and live in a social system that is conducive to health. The history of the book's travels across the subcontinent tell important stories about the people who have carried it, and how knowledge about health is created, contested, and changed over time. Because it was designed with and for community health

workers – generally people with a small amount of training in basic prevention and care – *Where There Is No Doctor* has been closely associated with programs to train and support such workers. But it is also used in homes, picked up from libraries, and referenced by doctors.

Key findings

Dr. Ravi Narayan's description of the book's catalytic nature reflects Sathyamala's description, quoted at the end of chapter one, that *Where There Is No Doctor* represented a Kuhnian (1962) paradigm shift in community health texts. I build on her analysis that the text represented a break in the kinds of texts produced, and that the texts it inspired comprise a 'normal science' of Freirean health education writing that trusts both people's existing knowledge and ability to learn about their bodies. Such trust in people remains a key contribution to the health of individuals and communities around the world, although it is reflected in a minority of health texts. I argue that *Where There Is No Doctor* reflects paradigm shifts on three levels: first, by engaging both political and technical interventions for health; second, by propelling global travels through localization; and third, by enabling and inviting the production of knowledge through translation and adaptation. Chapter 1 provided the empirical and theoretical background for this study, and articulated key questions about traveling texts and traveling ideas. The empirical chapters that followed offered three different levels of analytic engagement: a macro-level approach focused on social movements, government and non-profit programs, and the ideas and interventions created across them; a meso-level approach focused on the texts as they travel by changing, and a micro-level approach looking at the words on the pages, and the knowledges produced between them.

Chapter 2 played a dual role. First, it developed a theoretical structure for the project, using social worlds/arenas maps to analyze the travels of the books and arguing that they function as boundary objects. Second, I used these tools to conduct an analysis of the travels of *Where There Is No Doctor* and books it has inspired in India. I argued that these travels reflect larger arguments about where health comes from, including imagined and implicated people and communities, government programs, non-profit and explicitly political activist spaces, and various combinations of each. In a world of enduring health inequalities, these travels reflect varying combinations of technical and political interventions for health that participants believe will create the conditions necessary to achieve health for all.

As the books have traveled, they have been adapted and translated. Chapter 3 explored the layers of localization that this creates and argued that these layers, traveling with and through a medically pluralist book and social spaces, work together to create a successfully global object that is both recognizable and consistently distinct. Layers are created as editors adapt illustrations and herbal home remedies, and other editors build on, reject, and change further the localized images and herbs across time and language editions. I argued that it is the flexibility and pluralistic knowledge structure of the book that makes it a successfully global object; its invitation and ability to change, while remaining recognizable, has allowed it to travel further than any other health text.

What is produced in these travels? Texts, images, vocabulary – and new possibilities for understanding and action. Chapter 4 traced the production of knowledge through translation, focusing on how health knowledges are produced through efforts to create language that is both comprehensible and motivational, across considerable social distances. I then explored the ways this knowledge production is assessed through gathering feedback, and closed with an

exploration of the way knowledge is produced and travels as new vocabulary spreads beyond the books and into wider circulation. These processes reflect the ways that *Where There Is No Doctor* and its companion texts travel as a set of ideas – including the focus on comprehensibility and motivation that are reflected on the back of the text, and in Dr. Ravi Narayan's description above of the book's impact.

Theoretical contributions

This dissertation offers a sociology of health knowledges produced in translation. It contributes to the field of postcolonial science and technology studies by providing an empirical exploration of health knowledges produced across difference, and across language. It locates layering of locals as a driver of global travels, attributing the kind of 'moderns' and 'locals' that Anderson (2002) writes about to both former colonies and colonizers. In taking up postcolonial STS, I also make a specific claim that health – including notions of primary health, community health, and prevention – count as science and technology. Moreover, I argue that a low-literacy book is an important kind of technology to consider, and that the pedagogy behind it is an important form of science. These constructions both reveal the power of those tools and pedagogy to shape life, and the potential they carry to reify as well as to undermine hierarchy. Specifically, I found that *Where There Is No Doctor*, as a science and technology package, reifies power dynamics – traveling through highly educated translators with illustrations of light-skinned people – while also undermining traditional hierarchies of health knowledges. I argue that it creates space for a rare institutionalization of medical lore (Sujatha 2007), and creates a form of expertise out of the layering of knowledges usually considered to be lay.

This project is situated at the intersection of postcolonial science and technology studies (STS), critical global health, and the sociology of health and illness. It contributes to theoretical work on the production and movements of knowledges across borders and scales, emphasizing the ways in which the localization and integration of knowledges usually designated as lay that produce the astounding travels of this text and its relatives. Responding to calls to build postcolonial STS and critical global health studies (Anderson 2014; Biehl and Petryna 2013; Clarke et al. 2010), I contribute a case study that focuses on the travels of texts and the travels of ideas, and the people who produce, move, value, discard, and change them. I am both indebted to the work of Latour (2007, 1987) and others (Callon 1984), who introduced non-human objects such as these texts to the center of analyses of social action in the Western theoretical canon, and build on critiques of that work as flattening of power dynamics. I take up situational analysis (Clarke et al. 2017) as a theory-methods package, and as a feminist, postcolonial set of tools with which to maintain a clear view of those power dynamics, pairing it with boundary object theory (Star 2010; Star and Griesemer 1989), sociologies of knowledges (Popay and Williams 1996; Wynne 1996), and translation studies (Wolf and Fukari 2007) to analyze these travels across multiple levels. In order to produce an explicitly postcolonial theoretical analysis and situate the knowledge ecologies of my participants, I take up the work of social theorists writing from and about India. Specifically, I build on the work of Chakrabarty (2000) and the Subaltern Studies Group (Prakash 1999; Spivak 1988), and of my mentor V. Sujatha (Sujatha 2007; Sujatha and Abraham 2012), engaging with sociologies of knowledge produced alongside these texts.

Working with postcolonial theory raises questions of when and how global health projects are colonizing, and how this relates to institutionalization at local and global levels. *Where There Is No Doctor*, in part because of its open copyright, is never fully institutionalized.

This does not necessarily designate it as non-colonial in its travels, although it travels in many circles with a political critique of power structures. However, it does give insight into the conditions and ingredients that make a successfully global object – not conditions of colonization or institutionalization, but a flexible, rhizomatic project (Deleuze and Guattari 1987). *Where There Is No Doctor* travels in postcolonial pathways – linguistically, organizationally, and in its distribution – and to some degree reifies them. But it also travels with social movements that explicitly reject local and global hierarchies, connecting an analysis across these spaces to emphasize the importance of people's knowledge about their bodies, and their ability to impact both their own health, and the health of others. For this project, it was crucial to connect macro, meso, and micro levels of social analysis, engaging the ways in which big ideas impact individual bodies, and vice versa. The experiences of Sharada Gopal's mother, caring for children and neighbors in an isolated mountain village, shape the Kannada text, which in turn is printed by a medical school in Bangalore and used to train community health workers living on the edge of a technology-boom fueled megacity. The concept that these women's knowledges should be codified in a text and travel with it reflects larger commitments to a politics of knowledge that trusts the knowledge of people with limited formal education, even while it travels through the writing and translation of others specialized in medicine, public health, publishing, and journalism. I argue that the production, travels, and valuation of these health knowledges, usually designated as lay, are a crucial contribution to both global health more broadly, and to the successful travels of this text. The books travel by changing, and change by taking up a variety of kinds of knowledges: the production and movement of those 'local' knowledges, therefore, drives the global travels of this widely used text.

As a building block in the emerging field of critical global health, my project shares with Crane's (2013) a focus on meso-level actors: highly educated professionals working from outside the US and Europe, both highly aware of the global power dynamics at play (and sometimes contesting them directly in court battles over pharmaceuticals, for example, or working for multilateral agencies as consultants) and committed to serving people with limited access to systems of health and welfare within the country, let alone on a transnational scale. These actors – translators of *Where There Is No Doctor* – provide their own analyses, which I share and build on to tell the story of these books, the networks through which they travel, and the knowledges produced in translation and layered to produced new forms of expertise. However, this project also contributes something very different than the kind of ethnography of emerging global health science that Crane provides: here I look at a project that started in the 1970's, focusing on written and spoken words rather than lab science and clinical health. Future work in critical global health studies must continue to tack back and forth across these levels, and draw on the analytic insight of actors from all types of knowledge production systems. Work produced by and for scholars in the Global South will be particularly important: integrating this scholarship into global health studies and courses in the US is an important task for scholars and instructors, and one this project contributes to.

To walk across these macro, meso, and micro levels of analysis, I followed the advice in the epigraph to Clarke and colleagues' text *Biomedicalization* (2010), which ruminated on the tools needed to expand that project to a global scale, emphasizing the methodological practice of "following that x" (in this case, the books). While this project does not focus on biomedicalization, there are many rich strands of data focused on the demystification of medical knowledge that Drs. Ravi Narayan and Sathyamala associate with *Where There Is No Doctor*, as

well as reflections on medicalization, biomedicalization, and de-medicalization that this implies as the book travels and changes. Specifically, Clarke and colleagues' emphasis on the key concepts of transnationalization, and of medical pluralisms, partialisms, and stratifications (Clarke et al. 2010:388) are clearly reflected in this analysis. Working in India demands an engagement with ideas and realities of heterogeneity, access, and both colonialism and postcolonialism, all of which the authors focus on. In a country of India's size, diversity, and history the ways in which these books travel across difference, reifying and undermining hierarchies, becomes poignantly clear. Finally, this project both demands and contributes a recognition of the intellectual work done by participants, whose insight forms the basis for both the ability of thousands of readers to pick up and use these texts, and for the analytic work done in this dissertation. While the epilogue of *Biomedicalization* looks past the US, this is still a relatively unexplored move.

The sociology of health and illness, as it has been practiced in the US, has focused primarily on health care in the US context. This project builds on work looking outward, but also across spaces, not centering the US and clinics and the health knowledges produced there, but not ignoring their roles and unique power dynamics either. It picks up debates on lay and expert health knowledges, arguing that the layering of health knowledges usually designated as lay creates a form of expertise. As a sociology of knowledge project, I build on Sujatha's (2007) work on medical lore to argue that these knowledges are systematized but not institutionalized. Institutionalizing them in these traveling texts creates a new kind of health knowledge circulation, one which comes to full fruition only when it is acted on – something this study, as it does not trace the use of the book to serve communities directly, cannot directly demonstrate. As a sociology of global health grows, it expands the scope of the sociology of health and illness,

connecting that field more explicitly to work in global and transnational sociology, sociology of development, medical anthropology, and global health sciences.

As a sociological analysis of traveling health knowledges, this study of the travels of *Where There Is No Doctor* and *Where Women Have No Doctor* has considerable overlap with Davis's (2007) book *The Making of Our Bodies, Ourselves: How Feminism Travels Across Borders*. Davis provides a feminist analysis of the creation and uptake of this classic women's health manual. Her telling provides one of few close looks at how a public health manual that explicitly values lay knowledge about health was created and taken up around the world; this makes it an excellent companion to this project. *Our Bodies, Ourselves* (OBOS) was written by the Boston Women's Health Collective, and has been translated and adapted by groups around the world. Davis treats OBOS as an explicitly epistemological project, in the way that it actively contested patriarchal, medicalized treatment of women's bodies, as well as "travelling theory in a global context," a way to look at the spread of ideas and practices of feminist movements (Davis 2007:7). Davis draws on interviews with a wide variety of people who have written, edited, adapted, and translated the book, as well as people who have done other kinds of work for non-profits supporting the book, both in the US and around the world.

Davis notes that very little of this global uptake was direct translation – most were adaptations of the book, often inspired by the use of a group process focused on the lived experiences of a core set of women and inspired by the origin story of the book. What traveled best about the book was the process by which it was created – a process which valued the lived experiences of individuals, and the right and ability of any woman to access and use knowledge about her own body. In a pattern seen across translations, new words created for the book (such as language around domestic violence) came into wider use. Davis refers to this phenomenon as

a type of "linguistic innovation" to "reclaim women's bodies," and a number of adaptors report changing or making up new words during the book development process (2007:171). *Where There Is No Doctor* was written in Mexico and translated into English in the US, traveling in many ways from that location. I treat the text as an explicitly epistemological project, and an example of the spread of a Freirean health education model. In both cases, translations involve significant adaptation, and take up participatory development processes that influence the kinds of knowledges produced and included. Finally, the way language is created – and reflects the production of new and specific knowledges designed to motivate people to take action for health – is common across both texts, and reflects the epistemological and political relationship between the texts.

This dissertation offers a sociology of health knowledges produced in translation that draws on and contributes to important work in postcolonial STS and critical global health. It suggests new ways to trace the bumpy, uneven, contested, and heterogenous production of health knowledges across difference. As Dr. Ravi Narayan says above, "after all, it's everybody's own body, so they should know about it." Each body is different, and so is each person's knowledge about their own body, filtered through health systems – including allopathy, Ayurveda, Siddha, and others – that build on and often contradict one another. In this context, what kinds of work do these books do, and what subjectivities do they create? I argue they both attempt to create Freirean subjects – people ready and willing to think critically about health, building on cycles of action and reflection – while reinforcing patterns of self-observation and adjustment often associated with the production of neoliberal subjects (Foucault 1980). These subjectivities are especially compelling in terms of the generally simplistic use of 'empowerment' as a concept and goal in global health. The books aim to create subjects who watch themselves and their

surroundings for causes of good and poor health, and for the social structures that promote health and undermine illness, both in their own bodies, and in the community around them.

Lessons learned and implications for practice

Many of the participants in this project shared their time at least in part with the hope that their experiences translating and adapting the book would be helpful to others doing the same. While a study of the use of the book, and the mechanics of supporting translations, were not the goals of this project, some insights on these topics did come through, related to ways in which the book became a successfully global object. Within the text, related factors come through in the ways the book has functioned. First, the invitation to change helped the books to travel. They contain both explicit invitations to adapt and translate, and an open copyright structure that was ahead of its time. Inside the text, the open copyright encourages translators to re-draw illustrations and update biomedical and herbal remedies to reflect local availability; readers can 'see' themselves in *Where There Is No Doctor* and put information to use immediately. One clear recommendation from this is to utilize open copyrights – now much more common – to encourage the spread of health materials, and to include active invitations to adapt materials, both at the opening and throughout the text.

Both the books Hesperian produces and those adapted and translated are field tested in various ways: text is given and read to future readers, and their feedback is taken seriously in the editorial process. While Hesperian has worked to share its field testing process, people less familiar with it create their own. This is reflected inside the text in the way that *Where There Is No Doctor* trusts and supports readers to be active, critical thinkers, to know what they need and

to assess different options, and includes information on and critiques of biomedicine and other forms of care. For the creation of new health materials, this underscores the importance of trusting readers both to provide valuable feedback, and to use the information in ways that will be most helpful for their lives and communities. Finally, as the experiences of both Hesperian and VHAI attest, actively seeding translations and adaptations helps to spread the books – but giving open-ended permission for unrelated and unknown groups to take up the work is equally important. This diversity of use is reflected in the popular education models the text draws on, which allow use as a tool for health education, and for politicized work. When distributing health materials, this accentuates the value of integrating popular education techniques, both in the text and in distribution models: knowing that people learn best and create the most sustainable systems when they take up materials they actively want and adapt them for the needs they see.

From the subsample of interviews of people using the books for training and community health work, there are three preliminary findings. First, the books are used as reference materials – they are often described in relation to a dictionary or bible, as noted above – and are rarely read straight through or in full. Second, translation is time-consuming and not always possible. Partial uses and adaptations are common; for example, making large cards for group education based on illustrations from *A Book for Midwives*, as discussed in chapter three. Third, participants who use the books regularly did not feel that any parts of the text should be removed. They did have a variety of small suggestions for things to add, focused on making the text locally relevant in terms of both illness and treatment. These preliminary findings suggest that creating materials as references, that can be taken apart and adapted in small ways as well as larger ones, rather than manuals expected to be used in full, is important for providing information that allows people to take action for the health of themselves and their communities.

Future research directions

The data collected for this dissertation suggests a range of additional analyses, as well as new projects to consider. One important theme in the data that is not reflected in its own chapter is the care work that is required to create these translations. Not surprisingly, this was brought up only in conversation with women. Stories about who fed the family, held the baby, and did other household work while translation was being done, or about giving feedback in between cooking and putting children to bed are as important as stories about how language was chosen or how material was adapted. The labor of cooks, housecleaners, parents, siblings, in-laws and children was relied upon, often for both care work to support daily life and for feedback on language choices and health content. While these themes are addressed at various points in the chapters, they are not the focus of any one part of the analysis. As these are the stories and labor that is most often left out of stories about how knowledge is produced, I believe it is important to include them here, and in future iterations of this work.

In the coming years, I will develop a book proposal based on my dissertation and continue to develop sections into journal submissions. In addition to analyzing data that has been collected, there are many future iterations of this study that could be taken up. One version would be multi-sited, following knowledge flows produced at Hesperian and as they travel. While I conducted a limited number of interviews with staff and volunteers there, it would have been interesting to follow those back and forth with interviews with Indian translators and editors. In addition, focusing more time on studying Indian social theorists would have changed the analysis, as would time to return for further analytic development with participants through follow-up interviews. Following the books as they are used would provide another layer. Future

work tracing vocabulary and ideas of health, illness, prevention and treatment as they travel through use would provide rich analysis on the many levels of translation and adaptation in between page and bodies. Finally, what does not travel is just as interesting and informative as what does travel. Data on the travels – and their limits – of *Where Women Have No Doctor* informed this study. They are noted briefly below and will be further fleshed out in future manuscript or book iterations.

As the field of postcolonial STS is populated, there will be rich opportunities to compare this story of health knowledges produced in translation with others produced across different kinds of distance, different languages, and in different fields with different sciences and technologies. Medical translators, for example, conduct such knowledge production in real time, attempting to facilitate communication between clinicians and patients – or, if they are family members, to connect their loved ones with health care. Another way of building on this project would be a study of similar scope in and across a variety of countries, focused on different books, languages, and parts of the knowledge production process. Because this project was based on India, which has a particularly pronounced heterogeneity of health systems in active use, it made a sharp study of the medical pluralism in the book, and the way that different kinds of health knowledges are taken up and travel through the text. Focusing on a country where the book was distributed by government agencies would provide further insight on when and how the book does become institutionalized, while looking across Spanish-language adaptations and translations directly from those texts would provide a view into books never passing through English editions. Another option would be to study the only US-based adaptation of Hesperian books: JourneyWoman (2008) is an adaptation of *Where Women Have No Doctor*, done by a group of Native women in the Pacific Northwest. This would provide commentary on how

global health knowledges travel within and to the US, and ways in which adaptation functions as a form of translation in and of itself. Finally, a project that followed field testing processes would yield rich data on the ways in which different kinds of knowledges are produced and integrated in these texts.

The larger project of looking critically at global health knowledge production and travels also suggests a variety of future directions. One set of questions might explore the flow of global health knowledges into the US, looking at programs and ideas developed in other countries and adapted here. Such a project would be designed in part to counter the American exceptionalism that runs through the majority of global health projects designed in the US and implemented both across borders and domestically. It would continue to build on the intersection of postcolonial STS, critical global health, and the sociology of health and illness. An iteration of such a project that I have proposed is a study of HealthConnect, a health intervention inspired by the Iranian health houses model to improve access to health care in rural Mississippi. To help address these disparities, community health worker leaders were trained by Iranian public health professionals, and then integrated, adapted, and built on that training in their own work in Mississippi. This empirical site would be contextualized within the spread of community health worker programs around the world, including Jack Geiger's foundational work developing community health centers in Boston and the Mississippi Delta (Lefkowitz 2007).

In the development and implementation of the HealthConnect program, how were populations and health knowledges defined as American, Iranian, and pluralistic outcomes of both traditions? I plan to explore how this case of adaptation is situated within the larger uptake of community health programs in Mississippi, the US more broadly, Iran, and around the world. In addition, I will investigate in what ways knowledges produced through these programs lead to

reinterpretations of the Iranian health houses model to reach rural populations, and how they are institutionalized. Such a project could also be contextualized within a larger survey of the range of community health worker programs in the US, and the various countries they have been adapted from: for example, Latino Health Access in Orange County, CA draws on a Venezuelan model (Bracho et al. 2016). The global paths these knowledge flows travel are similar to the tracks that *Where There Is No Doctor* has left around the world – often in different directions, but traveling along similar meridians.

What doesn't travel

While the analysis in this dissertation focused significantly on *Where There Is No Doctor*, its companion texts – what might be considered the 'normal science' after the paradigm shift that the original text created – have equally rich stories. Their travels, while broad, are more limited, often because they focus on specific sub-populations or areas of health. Situational analysis encourages attention to silences in the data: stories that are not told, and must be constructed around an absence. I found that the travels of *Where Women Have No Doctor* were one such silence, despite the fact that when the book had been completed, Hesperian staff traveled to India to convene a meeting and support future translation and field testing. *Where Women Have No Doctor* was adapted to an English for India edition and translated to Hindi by VHAI, with a limited print run. A shortened version was translated and printed in Tamil, but copies are almost impossible to find. It was translated into Kannada, but never printed: the publisher considered it too risky to pay for the printing with a potentially limited audience to purchase the copies. The text clearly travels, but those travels are much more limited, in part because of the assumption

that there is less demand for a health text focused entirely on women. This concern has been validated in part by book sales – there has been limited demand for reprints of the VHAI editions, which have broader audiences than the unpublished Kannada version might find.

A second case study of books that travel in the style of *Where There Is No Doctor*, but in more proscribed ways, is the set of books related to disability – *Disabled Village Children, Helping Children Who Are Blind, Helping Children Who Are Deaf*, and *A Health Handbook for Women with Disabilities*. When these translations and adaptations were done by people connected to active networks of non-profits and government programs supporting such women and children, they have thrived and traveled within those networks. When people less connected to such networks attempted translations, the projects stalled for lack of funding or languished for lack of distribution. A focus in on these networks, and how work is done within and outside them, would provide important insight about the human relationships through which the books travel, and the ways in which different ideas about ability, disability, service, and care are produced.

Of course, the travels of *Where There Is No Doctor* also have their own limits. One of the major limits of the book's travels is the ways in which government agencies are interested in the text, but have stopped short of directly distributing it. The story of the closest such a government distribution came on a large scale in India is told by Padam Khanna, who edited the English for India edition for many years:

> One of the commissioners in the ministry got excited about *Where There is No Doctor*. This commissioner [said] 'Hey this is very useful for primary health centers and all that, to those people around in the villages.' I said 'Yes.' So initially he says, 'give me 5,000 copies in Hindi.' While the 5000 copies were being printed he added 30,000 more to it. He said, 'I need this book to be sent to all the PHCs [primary health centers in India], we have so many around, so print 35,000 copies'. We were very happy. We printed 35,000

> copies, supplied to [the] government of India straight away. And they said we are dispatching it. Two months gone, I did not hear much, three months gone did not hear much, six months gone I found out they were all lying at the godown [warehouse]. I said, 'you are wasting money, give me a list of PHCs, I am lifting all your copies.' I literally lifted all the copies to our godown here, all the 35,000 copies, got a list of all the Primary Health Centers from government of India... [and] mailed them personally. I said… 'these books serve a purpose and it needs to reach out'. Sometimes you got to do that. I am scared [for] the [copies of] *Where There is No Doctor*, whether it reached somewhere or did not reach. And if it reached some officer and [the] officer kept it in the library, did not use [it], it's useless.

I heard many stories like Padam's, about government officials being interested in or printing *Where There Is No Doctor*. Others told stories about what they saw as government repression of a text that could be perceived as a threat to the hegemonic power of the medical field – a translation competed and then the manuscript lost before it could be printed. While it is always harder to follow silences in the data than to follow the stories that are told, these anecdotes reflect the stories that almost happen – or happen in makeshift ways – and the travels that they make possible.

As I was getting ready to write the last pieces of this dissertation, it was announced that the seminal feminist health text, *Our Bodies, Ourselves*, would no longer be updated, and the non-profit that developed to support it would be closed. I have a copy of an early edition of the text on my desk, picked up by a friend from a free box on the streets of Berkeley. Both *Our Bodies, Ourselves* and *Where There Is No Doctor*, and both this study and Davis' (2007) study of OBOS, are explicitly epistemological projects, focusing on how the book travels outside of the US, how it changes (and how it travels because it changes), reflected in empirical details such as the creation and spread of new vocabulary. If OBOS represents one form of embodied traveling feminist theory, and at some level it is no longer traveling, what does that mean for the kind of feminist knowledge production that process represented? Is it no longer traveling, or has it just

moved to other spheres? The book had become longer over time, and the printing rights are currently held by commercial publishers. Iterations – and new texts inspired by the group knowledge-production process of OBOS – will continue to be adapted and written around the world, presumably. The American edition, as Davis hinted in 2007, may turn out to be less important and interesting then its traveling iterations.

Most of my participants agreed that *Where There Is No Doctor* was most widely used in the 80's and 90's, and that there has been a decline in its use ever since. New texts, adapting ideas, pictures, content, and structures, have been produced, and those travel in their own ways. What does this mean for the kind of knowledge production the book came to represent? Is it not traveling, or has it just moved to other spaces? Hesperian is increasing its digital work, and rewriting *Where There Is No Doctor* one chapter at a time; its work is changing rather than ending. While OBOS' creation story takes place in the US, for Hesperian, the US was always just another stopping point on the book's journeys to other locations, a location where it is rarely used but frequently passes through. These travels, through the US, but also through other nodes, traveling in colonial languages, creoles, and eventually native tongues are where the heart of the story lies. Epistemologically, Hesperian and the American English edition of *Where There Is No Doctor* it publishes do not seek to be a center – but rather a conduit through which knowledges and ideas travel, connecting grandmothers, doctors, school teachers, herbalists, and community health workers around the world.

Epilogue: but does it work?

Over and over, people asked me, but does it work? Does the book change health conditions? Does it get used in the way people think it will? Are the words really repeated? These are important questions to be asked, but this dissertation – and in many ways the text itself – doesn't try to answer them. What I argue does 'work' is the way the travels of this book function as a traveling epistemology: one that emphasizes trusting people and sharing knowledge. These two ideas are closely intertwined, because to risk sharing information that could be harmful (such as instructions for giving injections or using potentially poisonous plants like Angel's Trumpet) you have to trust the abilities of the people you share it with. This dissertation argues that the books work as a way for these ideas about health to travel – as a Kuhnian (1962) paradigm shift to a Freirean (1970) paradigm, and a demystification of medicine, bodies, and the many relationships between them. In doing so, I argue that epistemological shifts in health knowledge are as important as technical and political interventions – providing iron tables and fighting pharmaceutical companies and baby formula lobbies – for anyone hoping to shift health inequities and work for a world where health for all is possible.

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Appendix A: Interview Guide

Thank you for agreeing to participate! I'm interested in learning about your experiences as a user, reviewer, and translator of Hesperian materials. You can stop the interview at any time, or not answer a question if you prefer.

Questions	Prompts	Notes and optional questions
First, I'd like to know about your background, how you've been involved with Hesperian books.		
1. I'd like to start with a few questions about your background.	a. What was your training and work? b. Did you have any experience with health or translations before joining Hesperian?	
2. The next questions are about how you found Hesperian, and how you've been involved with them.	a. How did you first encounter Hesperian books? When? Doing what? Through what networks (if any) did this connection come about? b. What Hesperian books been involved with translation of? c. How did you get involved in the translation process?	Pick a translation to focus the interview on, but note full list and go back to other translations, and to experiences using and field testing other materials if time permits. i. What is similar and what is different about Hesperian materials, compared to other health care/training materials?
Next, I'd like to talk more about the translation process.		
3. First, let's talk about your role in the translation and adaptation process.	a. What did you think your role in the translation/adaptation process would be like? b. What was your role actually like? c. Do you follow any guiding principles?	
4. Next, I'd like to talk about the other people who helped with this process.	a. Who do you work with? b. How do you work together, or separately?	i. What do they like/dislike about the process? ii. How do they respond to the materials? What do

		they like and dislike about them?
5. Next, I'd like to ask about what kinds of information and experiences are used to do the translation.	a. Where do you get information? b. What do you do when you're unsure about something? c. Whose perspectives are included? Why? d. What is prioritized? Why?	i. What are the roles of different kinds of knowledge in the process and final product?
6. Next I'd like you to talk me through the translation process itself.	a. How long did it take? What were the different steps? b. What changed, and what stayed the same, in your opinion?	
7. Next I'd like to talk about how the translated version been shared.	a. Who is this book intended for? b. Have they been sold? Given away for free? c. What kinds of people have shared them? With whom, when, and why? d. Are there audiences, users, or networks you hoped the book would reach, that it hasn't gotten to?	
8. I'd like to talk about the relationship between you, the translation, and various networks.	a. What kind of networks have you been involved in, as a translator? b. What do you see as your role in *[fill in networks]*? c. What kinds of networks have the materials traveled through? d. What kind of impact were you hoping the materials would have in those networks? e. What kind of impact did the materials actually have in those networks?	i. Activist networks, medical and caregiving networks, and non-profit and government bodies?
9. Next I'd like to talk about who you feel this work is accountable to.	a. Who do you feel this work is meant to serve? Who is it useful to? b. Who else would you like it to reach? c. Who judges the final product?	i. Who gives feedback on the materials?
10. I'm curious how this process compares to other materials development and translations	a. How is it similar? Different? b. What makes this process difficult? Easy?	i. Do you think that the way Hesperian structures this process makes the materials any different?

efforts you have worked on.		
11. Finally, I'd like to talk about why you do this work.	a. What motivates you?	
Is there anything else that would be useful for me to know? Other questions I should have asked?		
Before we end, I have some short demographic questions to ask you.	a. What month and year were you born? b. How do you identify your race or ethnicity? c. Where were you born? d. Where do you live now? e. What languages do you speak? f. What is the highest level of education you have completed? g. Do you work with an organization? i. If yes, is it government, non-profit, university, or other? ii. What is your role? h. How many years have you worked as a health care worker (if applicable)? i. How many years have you worked training health workers (if applicable)?	

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