Chapter 1: Introduction

1.1 Introduction
The events and lives presented herein are but one version of reality, affected by the people who would talk to me, the events I was allowed to see and understand through the actions and interpretations of others, and a result of who I am in the world. I have sought to render linear and orderly a complex set of influences, narratives, rumors, and deep historical roots that are anything but. I have been able to call into being, to pin down, one version of events, even as the bodies, the institutions, and the lives presented continue to fracture, multiple versions hovering together, edges blurred as they oscillate between one form and the next, always just outside the bounds of our perception.

As much as this dissertation is about complexity-in work, in bodies, in institutions, in realities- it is also about care. In the obvious ways one might expect with a hospital ethnography, it is about the ways in which healthcare providers, working in environments characterized by scarcity, care for their patients or fail to be able to do so. But, this is also a story about the ways in which hospital administrators, and the hospital as an institution, (failed to) care for their employees- the nurses and doctors. It is a telling of the ways in which institutions may or may not be capable of caring for patients and for staff members even as the same institutions are sites, or conduits, of myriad forms of violence- ranging from the physical to the structural. Too, it is about relatives and communities caring for pregnant women and how these groups understand maternal deaths or obstetric emergencies through their interactions with healthcare at a regional hospital but also closer to home, in village dispensaries. It is about how these people are wounded by their interactions with their healthcare system through remembered and current incidences of corruption and exclusion. This is also a tale of the ways in which healthcare
providers sought to care for each other and for their own families while striving to uphold the professional ideals of medicine and nursing within a struggling system.

In this dissertation, I argue the fundamental point that the very institutions that politicians, clinicians, public health and policy practitioners, as well as the public, have imbued with the power to save lives, and which they conceived of as a panacea to solve the maternal mortality problem, are, instead, at the root of systemic failures to improve maternal health outcomes and care. The role these institutions are supposed to play is repeated and elevated in a sort of collective fantasy or imaginary about how to reduce maternal deaths, without adequately acknowledging the ways in which these institutions have failed to progress and the scarcity that forces deviation, justification, and improvisation that does not meet international best practice guidelines. I use insights from participant observation, interviews, group discussions, surveys, and primary source archival research to outline the ways in which history, political economics, and policy constantly permeate the borders of hospitals, individual bodies in obstetric crisis, and those bodies engaged in the work of mitigating such crises. This work seeks to challenge prevailing notions of where the boundaries of technologies, institutions, and policies lie, and how all three intersect with bodies and the many meanings of care in times of emergency and under conditions of scarcity.

The second goal of this dissertation is to present a thorough and nuanced portrait of the ways in which healthcare providers and administrators, in particular, work to provide maternal healthcare services and uphold the ideals of their professions within a bureaucratically and structurally constrained system. What follows in part III is a detailed account of the meaning healthcare providers and administrators in the Rukwa region attribute to maternal deaths and the meanings of care across myriad registers. I show how these actors cope with the deaths of
pregnant women and what they think causes them. This section also demonstrates the many barriers that can come in the way of providing high quality care at personal, institutional, and systemic levels.

1.2 The Research Problem: A Point of Departure

The World Health Organization (2016) defines maternal mortality as:

The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. To facilitate the identification of maternal deaths in circumstances in which cause of death attribution is inadequate, a new category has been introduced: Pregnancy-related death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death.

Research on the causes of maternal mortality in sub-Saharan Africa, the site of half of all such deaths globally, points to the combined, and interrelated, effects of poverty, lack of education, gaps in infrastructure, poor communication, and inadequate healthcare staff training (WHO 2012). Current global recommendations for reducing maternal deaths focus on ensuring women give birth with biomedical supervision. Despite these recommendations, women in Tanzania still have a 1 in 45 lifetime risk of dying due to pregnancy related causes\(^1\) (WHO 2015). As policies have shifted over the last 30 years, anthropological research has problematized global health recommendations for reducing maternal deaths, emphasizing the perspectives of women (Allen 2004), local healers (Pigg 1997; Langwick 2011, 2012), and their interactions with biomedicine (Langwick 2008). As a distinct but complementary approach, to explore another component of the complex contributors to maternal death, I embarked on an in-depth ethnography of the Mawingu Hospital in the Rukwa region of Tanzania, which has one of the highest maternal mortality rates in the country, to elucidate the routes through which the biomedical health care

\(^1\) For comparison, women in the United States have a 1 in 3,800 chance and women in the Netherlands, a 1 in 8,700 chance of dying due to pregnancy related causes (WHO 2015).
system as a bureaucracy may combine with these other complex dynamics to contribute to poor maternal health in the region (pilot data 2013; UNFPA 2011).

At a maternal death audit meeting at Mawingu Hospital in 2013, healthcare providers from the region determined that four of the six cases of death they were discussing would have been avoidable if the hospital had more efficiently managed the woman’s condition or taken a more comprehensive patient history. It was clear from their discussion that bureaucratic mishaps, systemic malfunctions, and social relations contributed to these lapses in care provision. Although it is undeniable that access to certain drugs and procedures can save a woman’s life, this research project sought to problematize an underlying policy assumption that if only a woman could reach a hospital, by overcoming community barriers to care, she would receive the life-saving help she needs. With this analysis I argue, instead, that institutional and social dynamics of the maternity ward, the hospital generally, and the overall health care system came together in ways that worked against a woman and contributed to the deterioration of her condition and her subsequent death in far too many instances.

This approach to the study of maternal death adds to anthropological understandings of how biomedical healthcare workers and administrators, as well as patients and their relatives, function with the confines of locally produced bureaucratic environments, hierarchies, and power structures. The institutional and administrative components of care, and their possible contribution to maternal deaths, as the explicit foci of inquiry, have been understudied in the sub-Saharan African context; African biomedical health care providers and administrators have been “functionally invisible” (Wendland 2010:22). Understanding the complex inner processes of

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2 But since Wendland wrote that statement, there have been a handful of studies on the perspectives of this population, notably including those also from African scholars (c.f. Kyakuwa 2009; Kyakuwa and Hardon 2012; Martin 2009; Mulemi 2010)
these institutions and their staff members has become even more important with a continued emphasis on biomedical birth to reduce maternal deaths. This research also contributes to understanding of the ways in which health bureaucracies as post-colonial projects are embodied in the context of maternal death.

1.3 Theoretical Framings and Analytic Lenses

In my framing of the research questions and design, I approached the topic with some central bodies of literature and theory in mind. Here, I call these the elements of the theoretical frame. Other ideas emerged inductively through the conduct of the fieldwork and the analysis of the rich words of my informants. I call these the analytic lenses which I apply to my interpretation of this work. Below, I lay out the be primary components of each, in order to situate what I have written in the chapters to follow. Throughout all of these topics, and the dissertation as a whole, the issue of political economics surfaces repeatedly. I use the term political economy to encompass the ways in which broad economic shifts and policies influence health in Tanzania, as well as the ways in which governance and political policies inform strategies to reduce maternal death. Tanzania, and the health of pregnant women, is embedded in a global political economic system that continues to shape inequity and public health interventions in a number of ways, which are apparent throughout the dissertation.

1.4 The Frames
1.4.1 The Anthropology of Reproduction: Birth as a Site of Power and Inequality

3 Throughout the dissertation, I use the term “institution” to refer to the hospital, as an organization, but also as a set of practices that orders the goals and activities of the organization. Hodgson (2006) more generally defines institutions as “systems of established and prevalent social rules that structure social interactions,” and while I do not use institutions in this way very much throughout the text, there are many aspects of work and interactions within Mawingu, and biomedical care more generally, that might be considered institutions. Additionally, chapter 4 introduces some other institutions, such as bridewealth and marriage.
The anthropology of health has long engaged with questions related to reproduction, though it was not until the feminist movement of the 1960s and 1970s that this field of research came to be a vital site for the study of women’s power and subordination (Browner and Sargent in Saillant and Genest 2007:233; Ginsburg and Rapp 1991). The anthropology of reproduction intersects with many other strains of anthropology including, but not limited to, kinship studies, marriage, parenting, and domestic economies (Ginsburg and Rapp 1991). Power is at the center of all of these relationships. As Thomas (2003:10) writes, “female initiation, pregnancy, and childbirth have long been important sites through which men and women of various ages and positions have constructed and contested power.” Gendered analyses of healthcare often take reproductive health as their starting point. Scholars use reproductive health as a place to highlight broader health inequities based on gender, particularly those inequities that have become clear with increased globalization or that continue to persist despite years of efforts to address them, as with maternal death (see, for example, the chapters by Nhongo-Simbanegavi; Desai; and Doyal in Kickbusch, Hartwig and List 2005; Inhorn 2006). In her 2006 work, Marcia Inhorn identified what she considered to be twelve vital areas for further research in the field of the anthropology of reproduction and women’s health. These included, among others, addressing the “increasing biomedical hegemony over women’s health; the production of health by women; the health-demoting effects of patriarchy;” state interventions in women’s health; and the “politics of women’s health” (Inhorn 2006:347), all of which I address in the dissertation and which have informed the framing of the research.

There have been many excellent ethnographic accounts of pregnancy, birth, the postpartum period, breastfeeding, and childrearing in a number of cultures (see Allen 2004; Andaya 2014; Berry 2010; Chapman 2010; Liamputtong 2007; Mabilia 2005; Pinto 2008;
Sargent 1982, 1989; and van Hollen 2003 for a sampling). A variety of themes recur within these ethnographic accounts and across cultures. Power dynamics, the imposition and integration of biomedical healthcare services and professionals, medicalization of pregnancy, birth and reproduction (Berry 2010; Pinto 2008; van Hollen 2003), and changing interactions between kin around the site of pregnancy (van Hollen 2003; Berry 2010), as well as the importance of pregnancy and birth as times for enacting “development” and progress (on state and personal levels) (Spangler 2011), all arise as central to understanding these transformative life events. So too do the issues of therapeutic choice and healthcare decision-making arise (Chapman 2010; Sargent 1982, 1989), and the ideas of risk and threat from both biological and supernatural forces (Allen 2004; Chapman 2010; Pinto 2008). Conflicting ideas about the appropriate role of biomedical care also emerge in many settings where biomedicine accompanied the colonialist project and has had a significant impact on ideas about pregnancy and care for pregnant women (Berry 2010; Chapman 2010; Lock and Nguyen 2010; Pinto 2008; Sargent 1982; van Hollen 2003).

At the heart of many of the studies on pregnancy and childbirth lie issues of power and politics, identity and social relationships. Pregnancy and reproduction are powerful sites of regulation, negotiation, and control. The political economy of pregnancy, birth and reproduction has become a crucial lens through which to analyze broader issues of social transformation, development, nationalism, and gender inequalities and follows more general trends in medical anthropology’s engagement with global health issues (Browner and Sargent 2011; Ginsburg and Rapp 1991, 1995; Janes and Corbett 2009; Kuhlmann and Annandale 2010). Soheir Morsy critically states,

[…] There remains a need to elaborate the relationship between women’s compromised health and state policies in historical and global contexts. Otherwise the state and
international development institutions will continue to be presented as the promoters of women’s well-being, absolved of responsibility for the social production of compromised health, while this responsibility remains assigned to ‘culture’ and potentially innumerable discrete variables ranging from those designated ‘individual’ to those labeled ‘institutional.’ (Morsy in Ginsburg and Rapp 1995:173)

This dissertation engages with the issues raised by Morsy by examining one particular hospital in a remote area of Tanzania and tracing its interconnectedness with a global system, related to the projectification of global health interventions (Rottenburg 2009), aid dependency and health financing, gender inequities, and the ways in which these and other structures collide in the lives of individual women, nurses, physicians, and health administrators. If women are treated differently because of their gender, or if government policies and institutions consistently work to systematically disadvantage women, despite the rhetoric of gender equality and human rights, women will never be able to achieve high levels of health.

1.4.2 Authoritative Knowledge and Childbirth

The concept of authoritative knowledge is integral to thinking about power relations within the healthcare setting. I include it here because I, like many other scholars, see the differential value of types of knowledge to be directly related to disempowerment and power relations throughout all levels of a society, but particularly in the hospital setting. Jordan (1993:152) writes, “The central observation is that for any particular domain several knowledge systems exist, some of which, by consensus, come to carry more weight than others, either because they explain the state of the world better for the purposes at hand (‘efficacy’) or because they are associated with a stronger power base (‘structural superiority’) and usually both.” This quote brings to the forefront the issues of power and a distinction between value and idea systems, which are perceived to have different levels of worth and validity. As biomedicine continues to reach into ever further corners of the world, its pervasiveness has meant the
importation of biomedical knowledge as the proverbial gold standard in many locations. However, the arrival of biomedicine did not preclude the continued utilization of alternative forms of healing or healthcare. The continued presence of coexisting systems proves time and again to be at the root of contestations over “truth” and “lies” on the maternity ward, as when nurses accuse women of killing their babies by drinking local herbal medicines or other non-biomedical treatments. Nurses might look down on a woman as being uneducated and “from the village,” in a derogatory sense, if they think she is resisting biomedical interventions, authority or methods. By extension, biomedical healthcare workers largely scoffed at the methods and knowledge of “traditional” healers and birth attendants, at least in public settings. At its heart, these are contestations related to power and authoritative knowledge within the walls of a regional hospital.

As certain ways of knowing, and the attendant practices, are discounted, others gain ascendance and are thereafter sustained and reproduced (Sargent and Bascope in Davis-Floyd and Sargent 1997:183). Sargent and Bascope (in Davis-Floyd and Sargent 1997) argue that authoritative knowledge, during the event of childbirth, may belong to those with the necessary technical control over aspects of birth, and not necessarily those in formally recognized positions of power and authority (Sargent and Bascope in Davis-Floyd and Sargent 1997:185). This means that the holders of authoritative knowledge may differ in different settings and in different “communities of practice;” the authoritative knowledge is contingent upon shared experience and social position (Sargent and Bascope in Davis-Floyd and Sargent 1997:185). Parallel systems of knowledge often exist (Jordan 1993:152) and the interactions of these systems can change, as when a formerly high-tech system, such as a public hospital in Kingston, Jamaica, becomes increasingly dysfunctional, thereby eroding some of the social distance between women
and healthcare workers formerly achieved through the technical expertise of the providers. This breakdown brought parallel systems into closer contact by decreasing the power differential (Sargent and Bascope in Davis-Floyd and Sargent 1997:203). Similarly, it might be that nurses in Tanzania label women as being “from the village” or use derogatory language as a way of emphasizing the distance in their social positions and concomitant access to authority and power. This may be necessary in the face of shortages of supplies and unreliable medical equipment.

In the sub-Saharan African context, colonizers brought with them biomedicine and added their power and authority to a set of practice already imbued by the authority scientific methods and knowledge have enjoyed since the Enlightenment period (Sargent and Bascope in Davis-Floyd and Sargent 1997:183). Jean Comaroff writes, “British colonialism in Africa, as a cultural enterprise, was inseparable from the rise of biomedicine as a science” (as cited in Thomas 2003:56). Extending beyond the importation of biomedicine during the colonial period, the social position of current healthcare workers is often important for the workers’ claims to authoritative knowledge and “has a basis in the legitimacy of the profession and its claim to generate and control authoritative knowledge” (Sargent and Bascope in Davis-Floyd and Sargent 1997:204).

Maintaining the image of a “good” nurse and striving to uphold the ideals of the nursing profession, as interpreted by my informants, influenced many of their actions and those of hospital administrators (chapter 7, for example).

At the heart of many of the conflicts and challenges related to maternal health and mortality is a disagreement about where is the proper place for a woman to give birth- is it at home, surrounded by those deemed socially appropriate? Or is it in a biomedical health facility, constrained by the norms and rules of such institutions and facilitated by the knowledge, technology, and tools of its staff members? This central question echoes out of the archival
documents, resonates with a number of other ethnographic works on birth (Allen 2004; Berry 2010; Chapman 2010; Van Hollen 2003) and persists in the changing policies of global health organizations (i.e. WHO) and even in local ordinances, such as those mandating fines for women who give birth at home (chapter 4). Is it the biomedical institution itself that somehow reduces maternal death, as might be envisioned by public health practitioners, or is there something more complex at play in these places that challenges this clinical reductionism and complicates perceptions and beliefs about how to best reduce the deaths of pregnant women?

1.4.3 Colonialism

It has been clear since maternal mortality became a part of national and global public health agendas that political economics and inequity structure the differential risk of dying during pregnancy that women face throughout the world. In the case of countries like Tanzania, the current political economic state cannot be uncoupled from an understanding of the country’s colonial past. Due to their lasting effects, colonialism and colonial administration of healthcare continue to be integral components for any analysis of the current state of health. A number of scholars have conducted historical and historical anthropological studies related to the development of healthcare systems under colonial rule (cf. Hunt 1999; Marks 1994; Vaughan 1991). These studies trace the introduction (Beck 1977; Patterson 1981; Turshen 1984) and expansion of biomedicine and public health projects (Gish 1975; Jeffery 1988; Lyons 2002; Packard 1989) in the colonial and post-colonial periods. Other works investigate the growth of bureaucratic institutional power in countries such as Tanzania (McCarthy 1982) and India (Gupta 2012), and the expansion of bureaucratic power through development projects (Ferguson 1990). I seek to extend these historical insights and connect their trajectory to the contemporary structure and function of healthcare services in Rukwa, Tanzania, including connections to broader global
discourses of the expansion of biomedicine as a post-colonial project that is still intertwined with development efforts and neoliberal policies. To this end, in chapter 3, I include primary source documents from the Tanzania National Archives related to healthcare infrastructure and expansion, policy, and administration in what is now called the Rukwa region, as well as Tanzania more generally.

A variety of works also trace the interactions between local peoples and colonial medicine as it formed a cornerstone of colonial policy (Olumwullah 2002; Hunt 1999; Vaughan 1991). Vaughan’s (1991:200) account of interactions between colonial medicine and local people works to demonstrate how biomedicine as a cultural system contributed to the construction of “the African.” Hunt’s (1999) expansive work is also important in this area. Broadly speaking, Hunt’s (1999) work concerns the interactions between missionary medicine and indigenous communities in the Congo, revealing the hybridity of form and meaning that biomedicine came to encompass in Zaire, differing from both indigenous healing practices and the biomedicine found in the metropole. Hunt (1999) places birth and the works of nurses and midwives in the center of her arguments about changes in bodily practices and meanings in the colonial context.

At the level of kinship and community, colonialism also had lasting effects. Intergenerational dynamics of social control and inheritance, as well as bridewealth and initiation ceremonies were all impacted by colonialism. While there are some particularly striking accounts of intense intergenerational conflict and the breakdown of intergenerational control during colonial times, these struggles have not been limited to the colonial period (see Comaroff and Comaroff in Weiss 2004). Snyder (2005) describes several examples of current day conflict between generations among the Iraqw of Tanzania. The loss of initiation ceremonies, the advent or popularization of different forms of marriage (or, for lack of marriage, see Hunter 2010), and
changes in orders of inheritance all are characteristic of the current period in time (see Rwebangira and Liljestrom 1998).

During the colonial period in South Africa, many European commentators saw colonialism as leading to the breakdown of the Bantu family, while many anthropologists had a more nuanced view of changing kin relations and the interactions between family members (Thomas in Cole and Thomas 2009:38). Much as a perceived rise in abortions in the Meru area of Kenya was thought to signal a breakdown in order and tradition (Thomas 2003), an increase in illegitimate pregnancies in South Africa was thought to presage drastic social change (Thomas in Cole and Thomas 2009:38). Anthropologists even went so far as to attribute the rising rate of premarital pregnancies to the inability of the older generation to control their children and hold young men responsible for their sexual actions (Thomas in Cole and Thomas 2009:38), an idea not inconceivable to the community members with whom I spoke who worried about their inability to prevent their children from early pregnancy and marriage (chapter 4). As families were pulled apart due to urbanization and educational opportunities or migratory labor, and capitalist accumulation subsumed older forms of wealth transfer between generations, it is incontestable that family dynamics and kin relations changed and continue to take on new forms.

Often, these social institutions continue to be in flux, particularly as they come into contact with ideas about human rights and gender equality. Intergenerational conflict can be particularly pronounced for women around reproduction and might be expressed via her husband as he mediates the expectations and demands of his parents or older kin (see chapter 4). As the world continues to become increasingly interconnected, generational differences also colored interactions between nurses and among other staff members at the hospital, with older nurses
accusing their juniors of being only interested in Facebook, WhatsApp, and texting on their cell phones, to the detriment of patient care.

1.4.4 Bureaucracy and Biobureaucracy

Many scholars seem to agree that the dominance of institutions (including the global hegemony of capitalism) is a key component of modernity, along with ever-increasing interconnectivity, sometimes in the form of these very institutions (Appadurai 1996:3; Giddens and Pierson 1998; Gyekye 1997; Knauft 2002; Pigg 1992). With the proliferation of institutions has come a deep interest in their functioning and the ways in which bureaucracy grows up alongside them in order to standardize complex procedures. Social scientific interest in bureaucracy was long a part of the domain of sociology dating from Weber (1947) and those who sought to build on or critique his perspectives (Constas 1958; Gupta 2012; Miller 1970; Rudolph and Rudolph 1979; Weiss 1983). Only relatively recently has bureaucracy become an explicit object of anthropological study. Classic studies of bureaucracies have focused on individual bureaucrats and their relation to clients, valuable context in order to understand the life- and work-worlds of government healthcare providers (Dubois 2010; Herzfeld 1992; Lipsky 2010). More recent ethnographic analyses of bureaucracies emphasize the ways in which politically or socially marginalized groups can work within a bureaucratic system to advocate for themselves (Chary et al. 2016; Hetherington 2011), or experience bureaucracy as a form of structural violence (Gupta 2012), and the ways in which the material products of bureaucracies can signify or create meaning, mediate relationships, or effect other ends (Hull 2012). Along these lines, there has been a surge of scholarly interest (c.f. Allard 2012; Cabot 2012; Drybread 2016; Gopfert 2013; Hull 2012; Jacob 2007; Lowenkron and Ferreira 2014; Riles 2006) in paperwork generated by and in bureaucratic systems, relevant to my exploration, in chapter 8, of
the effects of paperwork burdens on nurses, care, and accountability. I add to this growing literature through analysis of the social and relational objectives nurses and physicians accomplish in their utilization of and interactions with paperwork.

Bureaucratic structures can either constrain or facilitate worker autonomy and innovation, leading to stasis or dynamic change. More subtly, these structures aid in governance and control of clients subjected to these systems (Auyero 2012). The institutional characteristics of hospitals play an undeniable role in facilitating improvements or maintaining the status quo in care provision and patient experiences. I engage with the literature and theories of bureaucracy in order to investigate how patient care transpires in the messy space between uncontrollable patient worlds, providers’ lives outside work, larger political economic influences, and the static annual reports of hospital organization and policy (c.f. Britan and Cohen 1980). Hoag (2011) outlines inherent paradoxes of bureaucracy and its universal quest to bridge intent and realities of practice, which are particularly apt in a stressed rural hospital setting where it often seems the maternity ward is on the verge of collapse.

In order to integrate more explicitly some of the concepts from the study of bureaucracy with healthcare, I draw on Kohrman’s (2005:3) term “biobureaucracy.” Kohrman (2005:3) conceives of biobureaucracies as conglomerations of institutions that have cropped up and proliferated with a singular “conceptual and practical orientation of advancing the health and well-being of people understood to have bodies which are either damaged, sickly, or otherwise different, based on local or translocal norms of existence.” He goes on to specify that these biobureaucracies are intimately connected to the growth and multiplication of the biomedical and biological sciences, which have brought an attendant pattern of ways “for conceiving of and responding to normalcy and abnormality, health and pathology,” (Kohrman 2005:3). These
biobureaucracies can be transnational, international, community or religiously based, or key functions of a state, or a combination of any/all of the above. These biobureaucratic institutions structure the ways in which we conceive of and define, surveil, and seek to mitigate biomedical forms of pathology or bodily abnormality.

Though pregnancy is not an illness, under most normal circumstances, strikingly large biobureaucracies have emerged, seeking to combat those times when pregnancy and childbirth deviate from the biologically determined norm. Kohrman (2005) uses the term “biobureaucracies” to highlight the degree to which the expansion of biomedicine and its worldview are intrinsically linked to the expansion of bureaucratic institutions. Hunt (1999:4) suggests colonial efforts to increase birth rates and medicalize pregnancy “became enmeshed in the growth of bureaucratic state forms and la paperasserie of colonized life,” drawing attention to the fact that biobureaucracy is simply a new word for an old phenomenon. Biobureaucratic institution building has not yet been discussed enough from an anthropological perspective (Wolf 2012:93); it may be that certain bureaucratic features routinely accompany the expansion of biomedicine, while manifesting differently in specific local contexts, particularly as part of the post-colonial project. States have employed biobureaucratic institutions for functional and idealistic ends, such as improving the health of citizens in order to ensure a robust and productive workforce, but also by emphasizing healthy citizens as integral for the success of ideological nation-state goals, such as the realization of Ujamaa socialism in post-independence Tanzania. The idea of biobureaucratic control, proliferation, and functioning undergird and structure many of the arguments I make throughout the dissertation.
1.4.5 Hospital Ethnography

Hospital ethnography has roots in medical sociology but has grown into a sort of subfield within medical anthropology, with a particular set of perspectives, theories, and methodological approaches. An underlining principle is that hospitals are not clones of a universal model of biomedicine. Their particularities are determined by the specificities of the societies and geographic locations in which they are located (van der Geest and Finkler 2004). A second guiding principle is the view that hospitals are domains in which the core values and beliefs of cultures can come into view and these institutions “reflect and reinforce dominant social and cultural processes of their societies” (van der Geest and Finkler 2004:1996). Research interest in hospitals as locally particular institutional and social environments has seen a resurgence in medical anthropology only since the turn of the 21st century. For many years, hospitals were only infrequently a subject of anthropological interest, with more researchers focusing on “exotic” forms of healing. Hospital ethnography often demonstrates the inability of these institutions to excise patients entirely from their social settings (Bridges and Wilkinson 2011; Livingston 2012; Mulemi 2010; Smith-Oka 2013; Tanassi 2004; Varley 2016; Vermeulen 2004; Zaman 2004, 2005), despite the efforts of biomedicine to do so via medical records, bureaucratization of institutional procedures, the proliferation of various forms of documents, and the standardization of technical procedures. Hospital ethnography increasingly draws on ideas from science and technology studies for ways of understanding the events that transpire in these settings and in order to analyze the ways in which bodies are governed and acted upon in these settings (Pinto 2014; Street and Coleman 2012; Street 2014; Sullivan 2012; White, Hillman, and Latimer 2012).

Hospital ethnography also includes a particular set of complex ethical and methodological challenges. How does the researcher gain access to these highly specialized or technical environments (Inhorn 2004)? As a patient (van der Geest and Sarkodie 1998)? As the
helper or relative of a patient? As a staff member (Zaman 2008)? Wind (2008) proposes a form of “negotiated interactive observation” because, she asserts, it is often impractical, if not impossible, for the researcher to be seen as anything but in the hospital setting. The actors in the healthcare setting are constantly asking or wondering about the position of the researcher, which leads to an on-going negotiation of roles, perspectives, and experiences in that setting (Wind 2008). Wind (2008:87) states that negotiated interactive observation “captures what happens when you are doing fieldwork without at the same time assuming that you become one of ‘them.’” Though I do not agree with Wind’s assertion that the components of clinical practice are necessarily incompatible with also being a researcher and observer (perhaps if one were to be committed to full time work as a clinician this would be true), I do appreciate her description of the difficulties involved in clarifying or explaining one’s position in a clinical environment. For me, it was impossible, and unjustifiable, to simply sit idly, scribbling notes in what was to become my infamous little black notebook, while the maternity ward was overwhelmed with patients and lack of staff. I was, over the years, thrust into patient care (see more in chapter 2). My level of participation in the hospital environment undeniably was more extreme than would ever have been possible in a hospital in the United States, for example, due to differing legal requirements and protections. This meant I strove to constantly examine the ethics of my participation in patient care and procedures so as not to violate the maxim of do no harm.

Insights from ethnographic studies done in clinical settings helped framed my approaches to this research and the questions of maternal death in biomedical health facilities in Tanzania. For example, Inhorn (2003) discusses the ways in which providers’ personal attributes, and patients’ perceptions of how those affect care, influence interactions in infertility clinics. Livingston (2012) describes challenges facing oncology care providers in Botswana. Wendland
(2010) describes what motivated medical students in Malawi to enter their profession and how they understand their roles as medical professionals within broader society. Such studies discuss the importance of, but do not always fully interrogate, the sequences of events in biomedical institutions and how the very nature of the institution, and broader health system structures, may affect health. This is despite the fact that, in all healthcare facilities, institutional structures, processes, and interpersonal communication can drastically affect care. When these systems go awry, patients suffer debilitating consequences, even death (c.f. Gawande et al. 2003). In the United States, Greenberg et al. (2007) found that poor communication between incoming and outgoing shifts can result in missing files, the wrong patients being prepared for surgery, or delays in emergency surgeries- this in a well-funded, well-supplied institution with highly qualified providers. In sub-Saharan African biomedical settings, the same communication issues exist but often without the potential benefits of computers, electronic patient records, cutting-edge diagnostics, and virtually limitless supplies. With this dissertation, I seek to build on research on maternal mortality and health by offering a complementary perspective derived from the voices of maternal healthcare providers, administrators, and women, and informed by historical data. In seeking to understand how factors such as women perceiving nurses as “fierce,” or doctors saying all nurses have an “attitude problem,” relate to the institutional environment of Tanzanian biomedical care facilities and influence the health of pregnant women, this study complements previous research and enables a more nuanced and theoretically rich conception of the determinants of maternal risk and, ultimately, death.

1.5 The Analytic Lenses and Contributions to Theory
1.5.1 The Meanings of Maternal Death

The death of a woman when she is pregnant, or in the period surrounding the birth of her child, is undoubtedly a tragedy but how do different actors conceive of this event? By presenting
the perspectives of these different actors, I delineate the position-dependent interpretations of maternal death. I demonstrate the ways in which nurses, doctors, the hospital, the district and regional medical administrators, women and community members constructed maternal deaths and understood their meaning or significance in different ways. In chapter 4, I present the ways in which community members have experienced maternal death and healthcare services for pregnant women. In both chapters 4 and 6, I lay out the ways in which Tanzanian citizens interpret the failure of government healthcare services as a failure of caring and a failure to realize their rights as citizens of the country; the ultimate failure should be considered the death of a pregnant mother. In chapter 8, though more properly about stillbirth, I explore the ways in which women and their relatives speak about deaths that occur in the maternity ward. Chapter 9 includes an analysis of how healthcare administrators and the nurses and doctors talk about and cope with maternal deaths. For providers, these deaths may be bad luck, the culmination of unfortunate circumstances in the lives of women before they ever reached the hospital, or the result of a lack of knowledge or resources in the clinical setting. For the administrators, I discuss the ways in which they spoke of maternal deaths in their districts or region as being a source of embarrassment or an area for improvement when comparing themselves with the rest of the country. Ultimate, for the country, the recalcitrant nature of maternal deaths in many regions of Tanzania is a sign of continuing governance challenges, a failure of the state to progress, as measured against global indicators.

1.5.2 Metrics and Modalities of Accountability

Directly related to the different meanings of maternal death, particularly at the state level, is the growing centrality of measurement and data in the field of global health. With biobureaucratic expansion has come an increase in the modes of accounting for and measuring
health-interventions, outcomes, expenditures, deservingness of aid, and more (Adams 2016; Erikson 2012; Geurts 2015; Merry 2011). I delve into this subject more thoroughly in chapter 3, and the subject comes up repeatedly throughout (chapters 6, 8, and 9, for example). I present concepts of governance and health policy particularly by highlighting different modalities of accountability at the ward, hospital, regional, state, and global levels. These forms of accountability vary depending on the sites and circumstances but are often shaped by broader demands, such as those citing greater evidence, data, and accountability as the cure for maternal health problems (c.f. Hulton et al. 2014). Erikson (2012), for example, demonstrates, through examples from Germany and Sierra Leone, the ways in which numbers and statistics can be performances, drawing on business concepts of risk, return, and profitability: “Whether statistics are accurate or enough to improve health is less important than whether statistics are performed and work to enable economic systems” (Erikson 2012:373).

Here, accountability comes to take on, at least, two different meanings. First, the term can be thought of in relation to accounting for money-aid, investment, resources, supplies, equipment (c.f. Erikson 2012). Second, accountability can mean being accountable, as in being subject to report, explain, or justify actions (or inaction), which I use on the personal, instead of fiscal, level in order to talk about providers’ responsibility for care or other tasks in the biomedical setting. Providers talked about being accountable to themselves, to their superiors, to patients, to their profession. In turn, the hospital is accountable, at an institutional level, to the central government, and the central government is held accountable for expenditures and advancement towards achieving health indicators by a bevy of global organizations (the World Health Organization, the International Monetary Fund, the World Bank), nongovernmental organizations, and foreign governments which donate funds to the health sector (chapters 3 and
6, also Strong 2017). Some of these concepts also tie into the broader analysis of the ways in which global and/or national political economics influenced the functioning of the Tanzanian health sector during the time I was in the field. With the expansion of NGOs, direct budget contributions, and other forms of foreign aid and assistance to countries like Tanzania, there are a number of ways in which these organizations have demanded increased accountability while escaping it themselves by circumventing state structures (Rottenburg 2009). However, the state continues to play an important role as an employer of healthcare personnel, builder of certain forms of health infrastructure, and as an important actor in many other ways, though perhaps not always as in control as might be expected (Geissler 2015). How this reality of the para-state (Geissler 2015) intersects with healthcare administration and biobureaucracy in the realm of maternal health in Tanzania also emerges as a theme in Parts II and III of the dissertation, pointing out places where the state continues to be very present and others in which it exerts a very incomplete sort of control.

1.5.3 Risk and Uncertainty

Piot (1999:23) suggests that with increasing complexity, interconnectedness, and changing conceptions of time and space in a globalized world comes a profound sense of uncertainty and ambiguity. However, the concept of uncertainty, as well as the ways in which it is tied to health and misfortune, is much older than the current modern (or post-modern) moment (c.f. Douglas 1966; Evans-Pritchard 1937; Janzen 1981; Turner 1968; Whyte 1997). The forms of diagnosis with which I am concerned here are perhaps somewhat different than those mentioned by the likes of Evans-Pritchard and Turner but, the absence of pathology services in

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4 Portions of this section come from an article manuscript currently in preparation Strong 2016 in the bibliography.
Mawingu Hospital, and sometimes-limited diagnostic tools, shifts clinical uncertainty to the forefront in several of the deaths that occurred while I was there.

The very idea of illness is tied up with concepts of risk, uncertainty, and people’s desire to bring health problems back under their control (Steffen, Jenkins, and Jessen 2005). Skolbekken (1995) posits, in part, that an increase in biomedicine’s preoccupation with risk and risk reduction is related to an increase in medical technology, which has brought exponentially greater numbers of risk factors within human control, as never before in history. In seeking to control risk, people seek to know more about risk factors, looking for less uncertainty in disease pathways or trigger mechanisms. The uncertainty about an individual’s lifestyle, genetic makeup, or a virus’s mode of replication is now, itself, the risk. In the context of providing healthcare services, nurses and doctors must concern themselves with reducing their patients’ risk (or more precisely, probability) of contracting a disease or, in the case of maternal healthcare, developing a potentially life-threatening complication or emergency while pregnant or when giving birth. Anthropologists, and other social scientists, have often focused on the ways in which patients conceive of and mitigate risk in the healthcare setting or the ways in which people more generally conceive of risks to their health (Aronowitz 2009; Fredriksen 2005; Lock et al. 2007). Allen (2004) explicitly draws upon the concept of risk and risk management to explore safe motherhood in Tanzania, using a community based approach to elucidate everyday people’s perceptions of risks to motherhood and risks of motherhood as separately conceived categories. However, in my fieldwork, it became apparent that risk was also a constant influence on healthcare providers’ actions or interactions, even when they may not have always thought so in the moment. What has largely been missing from the literature, though often included as a side note to other descriptions (i.e. Wendland 2010:77), is a more thorough conceptualization of the
roles risk and uncertainty play in these under-resourced healthcare facilities, particularly when it comes to interactions with women or administrators.

1.5.4 Care

Concepts or theories of care and its nature go far beyond the technical or clinical components of care in the healthcare setting. Nursing has been portrayed as closely tied to gendered notions of caring, with nursing and the emotional dimensions of care being conflated with the feminine (Brown 2010; Henderson 2011; Leininger 1980) and compassionate care a mandated aspect of nursing practice (Schantz 2007). This mandate to care, and with compassion, extends back to the origins of nursing in the experiences of Florence Nightingale (see chapter 7). Chambliss (1996:2) suggests nurses experience conflict in their work environments sometimes as a result of being expected to do emotion work, which ordinarily would be able to emerge spontaneously. Instead, as Reverby (1987) suggests, nurses are “ordered to care.” Due to the ways in which illness and disease transcend the clinical realm and bleed into the social, medicine has never been solely a technical field, though in more recent times, the pendulum has swung to the side of technocracy, divorcing medicine’s art (of caring) from its science of curing (Kleinman 2008).

Through my participant observation at Mawingu Hospital, as well as countless hours of formal and informal conversations with women, neighbors, nurses, doctors, administrators, and community members, care took on a much fuller meaning. In the discussion that follows, I have found anthropologist Hannah Brown’s (2010) capacious definition of care, based on Mayeroff’s 1971 essay On Caring, to be particularly helpful for the theorization, or thinking through of, many of the actions, interactions, expectations, and disappointments I observed, experienced, and was told in interviews: “…Practices of care are other-directed (in their concern with the
development of the other) and are relationally locating.” Brown argues this is a suitably vague definition as to be useful to think with while centering on care as active practice, which allows the thinker to be freed of the boundaries of artificial dichotomies often imposed on care (Brown 2010; see also Mol 2008:5). To this definition, I also add Aber and Drotbohm’s (2015:2) definition of care, which states care can be “understood as a social practice that connects not only kinsmen and friends, neighbors and communities, but also other collectivities such as states and nations.” I would add to this only that care should be conceived of in the multiple, as social practices, without one singular form. They go on to say that, “care is a social and emotional practice that does not necessarily need to be defined in relation to the sphere of work, but rather entails the capacity to make, shape, and be made by social bonds,” (Aber and Drotbohm 2015:2) which adds further explanation to Brown’s (2010) “relationally locating” aspect of care.

With these concepts in hand, I argue that what I refer to as “institutional care” is a key component of this research and vital for understanding maternal healthcare. To different groups of my informants, institutional care meant different things. For the nurses and doctors, institutional care should be taken to refer to the set of ways in which their superiors, as agents of the institution of the hospital, cared for the hospital employees, or failed to do so in ways that met the expectations of those working on the wards. For women who came to the hospital as patients, institutional care encompassed the way in which biomedicine as a set of clinical or technical practices and affective relations with biomedical healthcare providers met (or did not) their needs for surveillance, rehabilitation, or mitigation of risk during pregnancy and while giving birth. For community members, institutional care in the context of biomedical healthcare services came to mean something slightly different. For these people, institutional care was more of an embodiment of the ways in which state institutions realized or actively thwarted their rights
as citizens of Tanzania. This form of care was undermined through community members’ interactions with corrupt, disrespectful, or negligent providers, as well as opaque bureaucratic mechanisms that prevented the expected (and government mandated) free healthcare for pregnant women and children under five, which is meant to include the provision of basic medications and healthcare services at the village dispensary level.

Care also should not be taken to have a universal quality; Tanzanian nurses’ actions, to my American upper-middle class, white sensibilities, might seem to be abusive and cruel but the nurses themselves describe these same interactions as the epitome of caring for a pregnant woman in the throes of a protracted second stage of labor, unable to finish pushing her baby into the world. Older nurses told me different ideas of what constituted professional nursing care than did the more recent nursing school graduates. Not overtly demonstrating sadness when faced with the death of women or babies on their ward was another way nurses expressed their caring, adopting a more stoic, business-like attitude in order to inspire patients’ confidence in their technical care abilities (chapter 9). Within the Tanzanian context, de Klerk (2013) writes about “toughening up” people after the loss of their relatives from HIV in Northern Tanzania. This toughening is a form of caring and support after the death of a loved one and I saw nurses engage in this type of rhetoric, telling women not to cry when faced with the death of their baby. Due to these examples, I take issue with how Henderson (2011:24), for one, describes care in the hospital setting, as something composed of a “distanced set of procedures,” which she contrasts with the caring, for AIDS patients, in this case, that takes place in the home, the neighborhood, or community, which “bears the emotional weight invested in bodies and gendered subjectivities” (Henderson 2011:24). To separate technical care from the affective work done by nurses and
other healthcare providers is a disservice to their particular subjectivities and collapses some of the complexity of working in a busy, under-resourced maternity ward (chapter 9).

I ascribe more to the open-ended explorations of care and its local meanings and practices as described by Mol, Moser, and Pols (2010:12), paying particular attention to “what is sought, fostered, or hoped for, then and there: what is performed as good...[and what] is avoided, resolved, or excluded: what is performed as bad” care in any particular setting. Sometimes these good and bad forms of care are obvious or straightforward but, more frequently, they are complex and ambivalent; “if one looks hard enough any particular ‘good’ practice may hold something ‘bad’ inside of it (and vice versa); ‘good enough’ care may be a wiser goal than care that is ‘ever better’” (Mol, Moser, and Pols 2010:12-13). Indeed, “good enough” care may be all that is possible in a certain setting. The authors continue by asserting that ethics of care include multiple versions of “good” that not only reflect particular, situated or subjective values, but also different ways of ordering reality; care “implies a negotiation about how different goods might coexist in a given, specific, local practice” (Mol, Moser, and Pols 2010:13).

Fassin (2008) also describes conflicting forms of care in a South African hospital and challenges reductionist interpretations of what causes care to not meet the desires and expectations of patients. De Klerk (2012, 2013) demonstrates that practices which, from the outside, may seem far from caring are, in fact, deeply important local forms of caring, such as concealing a person’s HIV status, particularly at the end of life, as form of compassion (de Klerk 2012). Dilger’s (2007, 2008) work on HIV in the Mara region of Tanzania also demonstrates other, local practices of caring as related to communities built through Pentecostal churches (Dilger 2007) and as enacted during burial practices for the deceased after HIV related deaths (Dilger 2008). In the context of maternal healthcare, “different goods” enter the picture as each
different actor seeks to give, receive, or demand care across various registers. The complexities and ambiguities of care practices will continue to arise throughout the dissertation.

As a note, it would be easy to think that those on the receiving end of the forms of institutional care I have just mentioned were passive recipients of care. Mol, Moser and Pols (2010:9) argue linguistic shifts, from “patient” to “customer,” for example, were in response to a need to acknowledge that receivers of care are not always passive and lacking in control. Mol (2008:7) argues that the logic of care involves action, is embedded in practices, focusing on what people do- as patients and the activities they are involved with, and as healthcare personnel. Thinking of my research informants, and those women and their relatives whom I came across in the biomedical setting, as simply passive recipients of care would not do justice to the ways in which all of these actors engaged with the biomedical healthcare system and its institutions. At all levels, there were examples of agency, activity, engagement, defiance, resistance, subversion, resilience—however one might prefer to name these actions. There were nurses who followed the OPRAS form, an annual evaluation of their work, to the letter in a quest to demonstrate to their superiors their deservingness of promotion. There were nurses who appropriated standard, technical documents to serve a broad array of social purposes (chapter 8). There were communities that chased out their providers after one too many people died due to a lack of timely care (chapter 4). And there were women who elected to bypass their local facilities, seeking services in facilities they perceived to be better, as well as those who absconded from the regional hospital maternity ward without discharge in the face of stillbirth and care that did not meet their desires and/or needs.

The way in which I conceive of institutional care is closely entangled with biobureaucracy. The biomedical institution is part and parcel of a global biobureaucratic complex
while also being a fully functioning biobureaucracy within its own right. Here, the boundaries of inside and out, local and global, are no longer useful. Biobureaucratic policies and institutional goals order expectations of care, in both the technical and affective registers (c.f. Mol, Moser and Pols 2010:12). Along with influencing expectations of care, the broader biobureaucracy of global health and safe motherhood has brought with it quality improvement guidelines aimed at improving “care” through increasing surveillance, documentation, and metrics. In fact, I argue, some of these guidelines and technocratic approaches disallow some forms of institutional care, or impose new tasks on nurses and doctors that then reduce workers’ satisfaction with their jobs. This reduced satisfaction can result in fraught interactions between patients and providers, leading to mistrust and rumor, which contribute to poor patient outcomes on the maternity ward.

Risk and uncertainty cannot possibly be disentangled from the concepts and modes of care presented herein. Healthcare workers and administrators, women and community members, all engage with both risk and uncertainty in the realm of reproduction. Attempts to mitigate risk in the face of uncertain physical health or uncertain supply chains, or to come to terms with forms of care that are not guaranteed, shape the ways in which all these actors perceive their positions within the healthcare system, as well as their interactions with one another. One of the greatest challenges of maternal mortality as a health problem is that it is exceedingly difficult to predict who will develop a life-threatening complication (chapter 4). Women and healthcare providers alike are unable to know with any degree of certainty whose body harbors the potential for hemorrhage, unforeseen eclampsia, or catastrophic amniotic fluid embolism. This uncertainty is only exacerbated by the lack of diagnostic or pathology resources at places such as Mawingu Hospital. This uncertainty also makes it more difficult for anyone to feel as though they have control over women’s outcomes or, indeed, any actual ability to reduce maternal death rates.
When every intervention is met with mixed results, conflicting or missing data, rumors, and claims of (or actual) mismanagement, is it any wonder that healthcare providers begin to work in a way that suggests they do not believe it is possible to make lasting changes to the system in which they work?

1.6 Background: Tanzania, the Rukwa Region, and the Health Sector

Before describing the organization of the dissertation, I include here brief background on the history of Tanzania, provide a description of the Rukwa region in which I conducted this research, and lay out the formal organization of the Tanzanian government healthcare sector. These background details will provide some structure and context for the discussions in the chapters to follow.

1.6.1 Tanganyika and Independence

After more than 80 years of colonial rule, first under the Germans and then the British, the move for independence began in earnest in the mid-1950’s. On December 9, 1961, Tanganyika peacefully gained its independence from Britain. Three years later, Tanganyika and the island nations of Zanzibar joined to form the United Republic of Tanzania (Krabacher, Kalipeni, and Layachi 2009: 98). After the United Republic of Tanzania was formed in 1964, Nyerere became president in a one-party election in 1965 (Krabacher, Kalipeni, and Layachi 2009: 98).

1.6.2 Post-independence Ujamaa and the Ideology of Self-Reliance

On February 5, 1967, President Nyerere issued the Arusha Declaration, outlining the country’s new policy on, what he termed, African socialism, or Ujamaa (literally “familyhood” in Swahili) (Nyerere 1968:13). These socialist policies included an emphasis on the equality of all citizens and on the idea of self-reliance. Politicians used the term self-reliance both to refer to
individual self-reliance, as well as the self-reliance of the Tanzanian state in regards to foreign relations and economic dependence on foreign aid (Nyerere 1968:16). Nyerere fully recognized the dangers of accepting outside funds because he saw that the country was poor and would be unable to repay loans or other assistance with ease. Additionally, the available assistance would not be able to fully fund development efforts in the country (Nyerere 1968:23-25). Perhaps most important ideologically, Nyerere stressed that independence meant not being dependent upon gifts and loans from other countries; independence meant self-reliance (Nyerere 1968:24). Unfortunately, Tanzania was still largely dependent upon these foreign monies because the major means of production were still owned by foreigners in the immediate post-colonial period (McHenry 1994: 167).

The most notorious legacy of Ujamaa is what came to be known as villagization, or the forced movement of the rural populations into cohesive villages in order to promote and strengthen agricultural production and facilitate the provision of social services. Just ten years after the Arusha Declaration, by 1977, there were more than 5,000 Ujamaa villages, which incorporated more than 13 million Tanzanians (Jennings 2008:48). To this day, sparsely populated rural areas remain an administrative challenge for the country but signs of communities that were created through the villagization are apparent, such as when I was riding in a car with local health administrators during a supportive supervision visit of one of the districts and one official noted that the villages neatly located close to roads must have been Ujamaa villages. She went on to suggest that other villages, which were further from infrastructure or hidden from view, were probably not due to Ujamaa efforts. Others in the car seemed to agree with her assessment.
Despite the rhetoric of self-reliance, and a general distrust of foreign money, the fundamental basis of the Tanzanian economy was still colonial in nature and the economy depended heavily upon cash crops (Campbell and Stein 1992:5). The main export crops were sisal and coffee, the prices of which were closely tied to the international market, making the country’s economy very susceptible to global price fluctuations. By the late 1970s Tanzania was feeling the effects of the deteriorating return on its primary cash crops resulting from global increases in oil prices, droughts, and a recession (Campbell and Stein 1992:5; McHenry 1994:167). This deepening economic crisis resulted in a steep decline in per capita income and increased the country’s susceptibility to the influence of foreign donors, as the country became more desperate for income (McHenry 1994: 167). By 1980, the country’s economic condition had worsened to the point that foreign capital equaled more than half of the gross investment. In light of the strong ideological rhetoric of self-reliance that had been in play for almost fifteen years, government officials and the common people did not welcome the prospect of entering into an agreement with the International Monetary Fund (IMF) (Biermann and Wagao 1986). Due to the global economic environment, many sub-Saharan African countries faced making a deal with the IMF and the World Bank or total economic collapse (McHenry 1994:167). These economic developments provide insight into the current structure and functioning of the Tanzanian healthcare system because events from this period resulted in wide-sweeping reforms, beginning in the mid-1980s, which drastically effected social services.

Many Tanzanian leaders felt that the conditions attached to IMF assistance would undermine the transition to socialism as, indeed, many IMF conditions emphasized capitalist

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5 Ten years earlier, foreign capital was only one tenth of the total gross investment, representing the country’s growing dependence on outside money to sustain the economy (Biermann and Wagao 1986).
economic liberalization (McHenry 1994:167). A structural adjustment program (SAP) was introduced in 1982 but the country did not enter into an official IMF accord until 1986 (Campbell and Stein 1992:7; McHenry 1994:167). The IMF package required the country to abandon or radically modify many of the policies that had been previously adopted to facilitate socialism. Despite the fact that some donor countries or loaning countries agreed to forgive large portions of Tanzania’s debt, this forgiveness most often was, and continues to be, contingent upon continued economic reforms and development in line with the vision of those institutions and governments providing the funds (McHenry 1994:169).

One of the major effects of the IMF and World Bank’s structural adjustment programs was to decrease expenditures on social services, including education and healthcare, and the Tanzanian government began to allow privatized healthcare services, which they had banned originally in 1977 (United Republic of Tanzania 2003). Hospitals faced drastic supply shortages and this resulted in increased maternal death, even at the largest and most capable hospitals in the country (Campbell and Stein 1992:109). Additionally, structural adjustment reduced provider wages and limited the number of new providers hired, further contributing to a general decline in living conditions and social service provision during the 1980s and early 1990s (Bech et al. 2013). Top-down focus on development, or maendeleo in Swahili, has continued to figure prominently in national-level planning and rhetoric, extending from the time of national self-reliance and Ujamaa, through the adoption of neoliberal reforms in the mid-1980’s, and the

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6 Structural Adjustment Programs from the IMF and the World Bank generally required countries to: 1) devalue the currency in order to make exports less expensive for foreign buyers, 2) reduce deficits by freezing government salaries, 3) stop setting agricultural prices and eliminate subsidies to urban consumers, 4) end import restrictions, 5) privatize state-owned enterprises, and 6) increase bank interest rates to encourage savings to generate capital investment (Gordon 2007:87).
present-day reliance on non-governmental organizations and aid assistance (Nyerere 1973; Snyder 2005:4).

1.7 The Rukwa Region

The Rukwa region is one of the twenty regions, which make up mainland Tanzania (Fig. 1.1). It is the second largest region with a total population estimated at approximately 1.6 million people (Sumbawanga Regional Referral Hospital 2013). Until 2012, the Rukwa region also included Mpanda, which has since been turned into the administrative region of Katavi (Fig. 1.2). Also in 2012, a fourth administrative district was formed, the Kalambo District. The region now includes: Sumbawanga Urban District, Sumbawanga Rural (a.k.a. Sumbawanga DC), Kalambo, and Nkasi districts. The vast majority of people in the region, more than 90%, are involved in small-scale agriculture, growing primarily corn, millet, rice, beans, and cassava. Some people also grow sunflowers as both food and cash crops (Sumbawanga District Council 2012). The main ethnic group is the Fipa or Wafipa and their language is called Kifipa, with several different groups throughout the region, the members of which speak slightly different forms of Kifipa.

The region has historically been geographically and socially isolated with a reputation as a home to powerful witches and traditional healers (Willis 1978, 1981). One person even told me that he believes the region has the highest number of deaths from lightning strikes in the country and many people attribute these deaths to witchcraft (F. Mashigala, personal communication 2012). I was repeatedly told that powerful witches in the region were known for being able to send lightning to kill someone. In one book from 1977, Kesby describes the inhabitants of the Ufipa plateau as displaying a high degree of cultural unity, “of which the most dramatic example are the periodic witch-hunts,” further supporting the longstanding importance of witchcraft in this area; popularly, witch hunts in this area were still considered to be more numerous than in
other areas (Kesby 1977:160). Any time I got in a taxi in Tanzania and told the driver where I was working, I invariably got a response along the lines of, “Oh! But there are so many witches there!” The name, Sumbawanga, roughly translates to something along the lines of “to throw witchcraft.” This general public perception of the region as the home to powerful witches served as a deterrent to some healthcare providers. Dr. Deogratus of the Mawingu Hospital maternity ward told me that when he learned he had been posted to this region, he was reluctant to report partly due to concerns about poor infrastructure in the region but also because, he said, “There were stories that there were so many witches,” but he went on to add that when he arrived, in the end, he saw it was a fine place to live. However, these rumors prevented others from readily accepting positions in the region. Despite the rumors of witchcraft in the region, there is a history of Catholic missionary presence in the region dating back to the German colonial period (Smythe 2006).

Anecdotally, my informants cited little government support for infrastructure building or regional improvement, until the very recent past when a person from the region, Mizengo Pinda, succeeded in national politics and became the Prime Minister in 2008, a position he held until the most recent elections in 2015. One of the doctors at the Regional Hospital told me, on my first visit, “The people here in Rukwa, they are still sleeping. They haven’t woken up yet,” which was his way of saying that the region has been behind in terms of education, health, and infrastructure for many years. In chapter 3, I connect some of these present perceptions to the history of colonial occupation and activity in the region.

Sumbawanga Town is located on a plateau at an elevation of approximately 5,920 feet (1,804 m) above sea level. The region encompasses the Rukwa valley to the east, as well as the communities bordering Lake Rukwa in several areas, and is bordered in the West by Lake
Tanganyika, also at sea level. The varied terrain makes for a diversity of ecology and varied growing seasons and agricultural possibilities. However, it also provides a number of infrastructure and transportation challenges. Roads were slowly being completed across the region in order to ease travel and increase trade, via ports on Lake Tanganyika, between the rest of Tanzania and neighboring Democratic Republic of Congo. Several areas were still without cell phone reception when I was in the field, particularly those communities on the shores of Lake Tanganyika. Poor road conditions deteriorated further during the region’s rainy season which could last upwards of nearly six months, from November through the end of April.

![Fig. 1.1 Map of Tanzania (open source map)](image-url)
1.8 Health Sector Formal Organization and Referral Chain

A basic understanding of the formal organization of the government healthcare system within Tanzania contextualizes the events that follow in the rest of the dissertation. Here I present this organization as the government presents it and which organizes the government’s approach to healthcare delivery. In practice, men and women did not follow the referral chain and did not access the healthcare system in the linear way in which the government has designed the system to be used. Additionally, not all patients and communities had access to all levels of the healthcare system.

In addition to the Regional Hospital, the health sector was organized in accordance with formal government principles established in the mid-1990s meant to decentralize care and improve access for people in rural areas. The system in Rukwa consisted of four levels of facilities providing care, with community health workers below these, which I represent in Fig.
1.3 from my own data on the region’s health administration. Fig. 1.4 shows the more general pyramidal organization of healthcare services in Tanzania, which also coincides with the referral system (TZ MOHSW 2014). The Tanzanian healthcare sector more generally has undergone a process of decentralization in the past two decades. The remote location of the Rukwa region meant that approximately 51% of healthcare provider positions in the Sumbawanga Urban District alone remained vacant and it was an accepted fact that it was even more difficult to entice trained personnel to accept positions outside of the town and the Urban District (Sumbawanga District Council 2012). The region ranks last in terms of the average distance people must travel to a full service hospital, the one regional hospital, an average of between 77 and 200 kilometers\(^7\) (Sumbawanga Regional Referral Hospital 2013). The region ranks fourth from last in the number of medical officers and nurses per population though no specific number was available (Sumbawanga Regional Referral Hospital 2013).

\(^7\) Now that Katavi is a separate region, people from that area are referred to Mpanda, which should have helped to reduce the distance to full service health facilities.
Fig. 1.3 Health sector organization, Rukwa, Tanzania
The village health service is the lowest level of care and provides some basic health education and information in people’s homes at the community level. Each village health facility generally has two village health workers who have been selected by the village government and receive short training. In much of the Rukwa region these village health workers were supported by the organization Africare as part of the multi-NGO project Wazazi na Mwana⁸, aimed at improving

⁸ A group of NGOs, as well as USAID and CIDA (Canadian International Development Agency) ran this project collaboratively in the Rukwa and Geita regions.
maternal and child health outcomes in the region. The second level of care is comprised of village dispensaries. One of Tanzania’s primary health sector goals since 2010, when Jakaya Kikwete began his second term as president, has been to ensure each village has a dispensary. These are generally small health facilities without laboratory equipment and are most commonly staffed by medical attendants and enrolled nurses. Some dispensaries also have a clinical officer on staff. The dispensaries are supposed to serve approximately 6,000-10,000 people in the surrounding villages (TZ MOHSW 2014), meaning one dispensary could serve between one and five surrounding communities, by my estimation based on the population of villages in the Rukwa region. Next are the health centers, which serve approximately 50,000 people. After health centers, each administrative district in a region is supposed to have a district hospital. In the Rukwa region, as of the end of my fieldwork in 2015, there were two district hospitals but four administrative districts and the region had no immediate plans to build district hospitals in the two districts lacking such a facility. In Rukwa, both of these district hospitals were designated district hospitals (DDHs), which means they were run by religious organizations and have made an agreement with the Tanzanian government to act as district hospitals within the government health services referral chain.

Regional hospitals are the fifth level of care and there is generally one per region. These hospitals have specialists in various fields and offer more comprehensive services than those available at the district hospitals. The top level of care is the referral or consultant hospital. In Tanzania, currently there are four hospitals at this level: Muhimbili National Hospital in Dar es Salaam serving the eastern zone; Kilimanjaro Christian Medical Center (KCMC) serving the northern zone; Bugando Hospital in Mwanza serving the western zone; and Mbeya Hospital serving the southern highlands zone (TZ MoHSW 2014). The Mawingu Regional Referral
Hospital includes “referral” in its name to indicate it is the level responsible for referring patients out of the region, on to other levels of care, though throughout I generally refer to it simply as the Mawingu Hospital. The next point of referral from the Mawingu Hospital, before referral to Dar es Salaam, was the Mbeya Referral Hospital, approximately four hours away by private car. The coordination between these different levels of care, and the reliability of their providers, heavily influenced the ways in which patients sought care. The efficiency and competence of the medical personnel at the lower levels of care were critical for the timely functioning of the referral chain and, ultimately, could heavily influence health outcomes for patients seeking all forms of care. I witnessed this myself during visits to village dispensaries and the nurses at the regional hospital often spoke of the low skill levels of personnel in villages as a key cause of maternal deaths. Poor quality services at the lower levels resulted in ever-increasing numbers of patients at the Mawinga Regional Hospital, overburdening this facility as it took on patients that could have been served at lower levels.

The Mawingu Hospital had 270 inpatient beds and has been unable to increase this capacity over the last several years due to lack of funds to invest in infrastructure. The hospital has seen a dramatic increase in the number of patients served each year just since 2010 but without a concomitant increase in physical capacity (Prime Minister Office Regional Administration and Local Government [PMORALG] 2015:1), leading to a bed occupancy rate of 172%, representing a great deal of overcrowding, forcing patients to often share beds. Bed-sharing was particularly problematic on the maternity ward, which saw an increase in the number of births from 4,153 in 2012 (PMORALG 2015:12) to 5,825 in 2015, which averages between 500 and 600 births per month, or nearly 20 in every 24-hour period (ward monthly report books).
1.9 Organization of the Dissertation

The dissertation begins with an ethnographic anecdote in which the reader is drawn into the chaotic feeling of the maternity ward with its attendant uncertainty, violence, improvisation, and institutional norms. Part I includes this introduction and chapter 2, which is an explanation of the methods and ethical issues involved in the design and execution of the research. Chapter 2 ends with a discussion of my position in the field, with some comments on how my positionality may have influenced the data I was able to collect, as well as my interpretation of those data. Part II includes chapters 3 and 4 and examines the global construction of the problem of maternal mortality with brief background on the complexity of maternal death as a clinical and social problem. Chapter 3 reviews the specific efforts of Tanzania to address maternal mortality, covering the construction of the pregnant body as in need of oversight and the historical development of discourse around pregnancy and maternity care in Tanzania from the colonial period to the present day. I demonstrate how historical trends, in the Rukwa region and nationally, are later echoed in national policy shifts away from training traditional birth attendants to strongly, even coercively, encouraging women to give birth in biomedical facilities. In this chapter I also outline the development of healthcare services in the Rukwa region and connect challenges colonial officers cite in the archival materials to the present day challenges affecting the region. In chapter 4, I draw on community-level data to discuss the structures women faced in their daily lives that may have predisposed them to life-threatening obstetric emergencies, such as access to education and decision making in the family. I also recount the gendered logics that informed the ways in which men and women talked about gendered work, bridewealth, marriage and the status of women; I use the local level data to present a counterpoint to the logics that drive neoliberal global health policies and interventions as supported by organizations such as the WHO. Chapter 4 concludes with a discussion of women’s
expectations and experiences of health services when they were able to reach their local facility. These expectations and desires for care were sometimes influenced by historical notions of care or taboos during pregnancy as told by local midwives (wakunga wa jadi) and men’s and women’s previous experiences at these facilities. Additionally, I demonstrate ways in which different communities and individuals have (unevenly) taken up state and global health rhetoric and practices meant to encourage men to take part in their partner’s care during pregnancy and childbirth.

Part III of the dissertation is based on data collected at the regional hospital and is centered on the difficult work environment in which maternity care providers find themselves. Chapter 5 serves as an introduction to the layout and temporal and spatial flows of Mawingu Hospital. In chapter 6, I describe how maternity ward personnel faced a uniquely complex ward characterized by the unpredictability of labor and birth, as well as staffing deficits, low pay, and insufficient supplies and physical infrastructure. Motivation in the workplace became a central theme for the research participants. Their different positionalities within the hospital afforded different actors within the hospital varied access to information about how the health system operated, thereby informing how they interpreted what it means to be a motivated worker in an under-resourced environment. Here, too, I discuss the ways in which their work environment did not produce sufficient institutional care for the staff members, which may have detrimentally affected the care they, in turn, were able to provide to women in labor and during delivery. In addition to examining issues of motivation and what it means to “be called” to midwifery, in chapter 7 I deconstruct a protracted conflict over nursing uniforms to analyze gendered norms within biomedicine, what it means to be a “good” nurse, and the ways in which maternity nurses often failed to perform this role due to the very nature of maternity care, which disallowed the
same norms and other regulations administrators intended to be applied universally throughout the hospital. This conflict epitomized the hospital’s resolute refusal to acknowledge the singular nonconformity of maternity care in their setting and was reflective of the challenges facing the standardization of maternal healthcare globally.

In chapter 8, using cases of stillbirth, I analyze systems of accountability and ethics within the hospital setting when care went wrong. I highlight the role of bureaucratic health sector procedures in limiting administrators’ ability to discipline staff members, which they told me reduced accountability but increased administrators’ and providers’ ethical and philosophical struggles when seeking to protect their patients and while coming to terms with their roles in the deaths of women and babies. I then end Part III with chapter 9, which is an examination of maternal death audit meetings, which are meant to prevent future deaths by examining gaps in care. Instead, I argue these meetings became more of a performance of process, giving the appearance of efficacy and complying with national and global demands for data and accountability, while not including viable interventions or follow-up actions. Providers often constructed a narrative in which the women who died came from remote areas “already dead,” shifting blame to forces outside the facility. I also discuss the ways in which maternity ward nurses used narrative as a way of coping with the deaths of mothers for whom they had cared, exploring the meanings they sought to construct around these deaths. I finish with a brief conclusion section which also includes some recommendations for the community, district, hospital, and national levels pertaining to the organization and administration of maternal healthcare.