ARTICLES

Constructing landscapes
Health care contexts in rural South Africa

Margaret Winchester and Brian King

Abstract

The concept of therapeutic landscapes has been adopted from geography by anthropologists with a similar commitment to addressing the intersections between the construction of place and the multifaceted and symbolic dimensions of health. Drawing from health geography and medical anthropology, we take up the challenge from these fields to approach health broadly in order to understand how health decision making is connected to intersecting political, economic, social, and cultural processes that shape what options are available to people. This article presents findings from an ongoing study of the political ecology of health in northeastern South Africa. We consider how therapeutic landscapes are produced by physical infrastructure, social dynamics, and the use of natural resources for livelihoods and health management. While each of these dimensions is critical in shaping human health, we argue that it is through their interaction that therapeutic landscapes are produced. Landscapes of care are thus complicated and shifting, with rural households making strategic decisions to leverage government support, social support, and resources for health management. We conclude by emphasizing the need for further integration of anthropological and geographic frameworks in studying human health.

Keywords

Introduction

> Next thing I know, we are past the tarred roads and bumping along a dirt track in a field of low scrub, with nothing visible on the horizon ahead. I navigate the holes, rocks, and thorny acacia trees, hoping for no tire punctures. The little boy in the back seat smells strongly of urine and the girl carrying him has a hacking wet cough. We are picking up their mother Nolwazi[1] from work at a farm 10 kilometers from their home to do a follow-up interview with her.
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> On the left we can see Ntunda, with more of a vantage point than I've had before. It looks nearly colorless against the gray sky, made up of mostly small square RDP homes [built through the government's Reconstruction and Development Program]. On the other side, in the distance, are the well-watered green sugarcane fields where the woman works. We come to a point where I cannot drive any further down the path. We call and her phone cuts out every ten seconds or so, making the calls short frantic bursts of loud directions shouted at each other. We come across two women waving frantically, despite being the only ones in sight. They climb in, smelling strongly of sweat and work. Both have their long skirts, head wraps, and layers of clothes on. We drop off the woman's friend on the way back to Ntunda and then get back to the place we started. (October 2013 field notes)

Nolwazi is HIV positive. Her experiences of illness and navigating the daily realities related to her health occur in the social and natural space described above. She relies on a combination of public and personal resources, including government-built clinics, roads, her garden, medication, and the ability to engage in paid work (which requires that she appear healthy). She also faces certain limitations, as she is excluded from government grants because she is from Mozambique, and she lacks a public space to practice her secondary livelihood as a traditional healer. Nolwazi's daily experiences as an HIV-positive woman intersect with overlapping layers of political, cultural, and environmental dynamics that produce the places she inhabits and the surrounding landscape. Utilizing the concept of therapeutic landscapes and a combination of anthropological and geographic frameworks, we can begin to make sense of Nolwazi's pursuit of health. We aim to understand how health decision making is connected to intersecting political, economic, social, and cultural processes that shape people's options for advancing their health.

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[1]   This is a Swazi pseudonym meaning 'one with knowledge'. All participant names have been changed or omitted to protect their identities.

The concept of therapeutic landscapes has been adopted from geography by anthropologists to include the multifaceted and symbolic dimensions of health, in addition to the complex dynamics shaping constructions of place. We extend the concept to incorporate the reciprocal relationships between humans and the natural environment, drawing from the literature on the political ecology of health (Hausermann 2012; Jackson and Neeley 2015; King 2010, 2015). While political ecology has been traditionally rooted within the discipline of geography, it has also been an approach taken by other disciplines to address the political economy of natural resource use, the impact of conservation and development in the global South, and the role of social movements in staking claims to resources (Zimmerer and Bassett 2003; Peet, Robbins, and Watts 2011). Our intention in this article is to extend scholarship on the political ecology of health by integrating it with insights from medical anthropology to reveal the complex dynamics shaping therapeutic landscapes in rural South Africa. We contend that geographic perspectives illuminate the significance of natural resources and health and environment interactions, while anthropological methods unearth subjective dimensions of these relationships.

In the first section, we delve further into the history and application of the concept of therapeutic landscapes in geography and anthropology, as well as potential spaces for collaboration. This is followed by findings from an ongoing research project of the political ecology of health in northeastern South Africa. South Africa, unlike many other sub-Saharan countries, has a relatively well-developed public health care system, yet still faces multiple burdens of disease and health disparities (see Honda et al. 2015; Ridde and Morestin 2011). Residents must be strategic in pursuing health, making daily choices that are informed by the availability of economic resources, public transport, and access to environmental resources. We use a case study of one village in rural South Africa to show how physical, structural, and social characteristics produce health experiences for local residents. While each of these dimensions is critical in shaping human health, we argue that it is through their interaction that therapeutic landscapes are produced. Even 'natural' dimensions of the landscape are socially produced and maintained. We conclude by asserting that the concept of therapeutic landscapes helps demonstrate the need for further integration of anthropological and geographic methods in the study of human health.

Building landscapes through theory

The concept of therapeutic landscapes was developed a quarter century ago 'as a framework for analysing healing places' (Gesler, this issue, 1). Though geography has a long tradition of engagement with place and landscapes, the concept was derived to build bridges with other social theories of health and healing (Gesler, this issue, 1992, 2003; Kearns and Gesler 1998). While traditionally therapeutic landscapes refer to 'health-enhancing' locales, the

components and experience of space can either enhance or detract from health (Gesler and Curtis 2007; Williams 2007). Gesler writes that the concept of therapeutic landscapes was intended to cross disciplinary divides and build holistic conceptualizations of health in particular locations, following the humanistic trends in some subfields of geography (this issue). Particularly important during the early 1990s was the expansion of research within the nascent subfield of health geography, which represented a departure from the largely positivist and quantitative medical geography tradition. By comparison, health geography tended to center on qualitative experiences of disease and health management, including subjective understandings that differed by class, gender, and race (Kearns and Moon 2002).

Gesler poses the question, 'How were people seeking care affected by the character of a place and how did these people alter that character'? (Gesler, this issue, 4). This reciprocal dynamic of human-environment interaction has been largely overlooked in the literature on therapeutic landscapes, and we contend that it is central to a holistic and relational perspective of how space and place interact with human health, as explored in other fields (see Ogden et al. 2013; Smyth 2005). In a review of trends within the literature, Smyth (2005, 490) points to a growing body of work that has:

> tended to examine the spaces within which health is played out. Rather than focusing on 'natural' elements of the landscape and their relationship to health, recent research has tended to examine the constructed spaces of health, often with attention to the ways in which such spaces may be untherapeutic, as much as the ways in which they serve to perform particular therapeutic functions.

This trend has produced studies that attend to where hospitals and other health centers are located, and to the physical experience for patients within a clinical setting (see, for example, Wood et al. 2013).

A geographic notion of landscape includes the natural environment, ecological assessments, and multiscalar issues of space. Some geographers have recognized the limitations of this approach and argued that landscapes include subjective and experiential dimensions of health; many include cultural dimensions in their analyses (Gastaldo, Andrews, and Khanlou 2004; Wilson 2003; Smyth 2005; Thorsen 2015). Through this interdisciplinary bridging, the concept of therapeutic landscapes has diverged from traditional geographic notions of landscapes. Critiques of the concept have suggested that healing is not limited to a specific location, but occurs in broad settings (Gastaldo et al. 2004; Wakefield and McMullan 2005; Conradson 2005; Smyth 2005). Social landscapes, they argue, can exert as much influence as physical ones in shaping experiences of health. Additionally, the physical landscape is not limited to clinical or spiritual sites, but incorporates community, work, and domestic spaces.

While health is acknowledged to be intersubjective, the co-construction of health with resources for health is less widely recognized. Anthropological notions of landscape and space are generally what geographers would refer to as humanistic or symbolic, emphasizing human interaction in particular locations, rather than physical features of the landscape (Foley 2011; Hampshire et al. 2011; Low 2009, 2011; McLean 2007; Pranikoff and Low 2007; Wood et al. 2013). However, the physical landscape remains important, particularly in settings where natural resources are central to rural livelihoods. As such, opportunities for health management are closely tied not just to people's experiences with nature, but with their collection and use of natural capital.

As recent work from Thorsen (2015) highlights, therapeutic landscapes have been little explored in non-Western settings. His work shows relational and overlapping meanings of landscapes, as they relate to pluralistic health practices. As he suggests, 'therapeutic landscapes are hence understood to be more than an objective reality, as each individual may view and experience their therapeutic landscapes differently, meaning that different, alternative or overlapping therapeutic landscapes exist in one location based on people's own views and understandings' (Thorsen 2015, 84). Expanding on Thorsen's symbolic and relational view of landscapes, we engage with health as understood outside of medical encounters, and with landscapes as experienced in many realms of daily life. We contend that applying the therapeutic landscape concept in a non-Western setting illuminates elements that help explain the lived experiences of health – such as use of natural resources – thereby expanding the concept. The specific factors that contribute to how disease and health are managed thus vary by context, necessitating detailed empirical studies to uncover the overlapping dynamics that intersect in generating therapeutic landscapes.

Methods: building landscapes in the field

In an ongoing National Science Foundation-funded study of the political ecology of health in northeastern South Africa, we are examining the relationships between health, livelihoods, and resource use. The project is centered in three towns of different sizes in the Nkomazi administrative district of Mpumalanga Province. This article draws from qualitative data gathered in Ntunda village between 2012 and 2014 to provide an in-depth examination of one particular therapeutic landscape. The research team is led by King, a geographer, and Winchester is a medical anthropologist who was a postdoctoral researcher in the study. The methods used in the study reflect our interdisciplinarity and the input of a highly experienced local field team.

Data have been collected in waves through repeat visits to Mpumalanga province, six visits to date since 2012. All participants gave oral informed consent and the research design was

approved by the Institutional Review Board of Pennsylvania State University. We utilize a mixed-methods approach to address our broad research interests, in line with geographic, anthropological, and other social science traditions (Greene 2008; Johnson, Onwuegbuzie, and Turner 2007). We use mixed methods to enhance our ability to ask complicated questions and to combine inductive and deductive approaches at all stages in the research process (Johnson et al. 2007). These methods have included focus group discussions, randomized door-to-door surveys, clinical observations and interviews, and in-depth qualitative interviews. The field team has varied by phase of data collection, but is composed of highly skilled local Swazi speakers with experience and training in research methods and data collection.

In Ntunda, we have completed two focus groups, fifty-four surveys, and twelve follow-up interviews on health management, resource use, and HIV. During the first phase of research, we held focus group discussions to gather general information on health and the environment. Two focus groups were organized in each village, one with men and one with women, all of whom were purposively selected by local home-based care organizations to represent heterogeneity of socioeconomic status in the area. Moderators asked open-ended questions to generate a list of concerns in each village, and probed specifically about issues related to health, health care seeking, and environmental conservation. From these discussions, we iteratively developed a questionnaire on health and environment interactions. The questionnaire consisted of two sections: the first, a forty-one-item section on household demographics, health status, and health practices; and the second, 140 questions on resource allocation and use, health-seeking behavior, community health, income generation, and community health and resources at the household level. The surveys and follow-up interviews were conducted with the self-designated heads of households. Following the surveys, we used nested qualitative interviews to further examine issues of particular interest, including health-seeking practices, HIV management, and natural resource collection. Interviewees were selected to maximize heterogeneity in age, employment, and household size within the sample and to roughly match the number of households with reported HIV infection and those without. These interviews were done with an investigator and a translator in the participants' homes, and ranged from thirty minutes to two hours.

All interviews and focus group recordings were translated and transcribed in a single process by members of the research team, and spot-checked by other native Swazi speakers for reliability. Transcripts were coded by both King and Winchester using broad thematic analysis and a priori and emergent themes (Ryan and Bernard 2003) including: natural resources, health seeking, economic concerns, government, and household dynamics. Household surveys were entered into SPSS for demographic, univariate, and bivariate analysis. In this article, we focus only on qualitative data collected in Ntunda.

The landscape of Ntunda

Three primary considerations emerge in the construction of the therapeutic landscape in Ntunda: infrastructure, social landscape, and natural resources. Each overlaps and intersects with the others. Using the case study of one village, we highlight the interactional dimensions of landscape, then consider each separately.

Ntunda is located in Mpumalanga Province, close to the borders of Mozambique and Swaziland, and over an hour from the provincial capital of Mbombela (formerly Nelspruit). There are two paved roads that connect to other towns in the region. The main ethnic group is Swazi, governed by the tribal authority offices in Schoemansdal, thirty minutes away. The town has a few so-called Indian shops, shabeens (bars), and garages, but no major commercial areas. The residents fortunate enough to have full-time employment work in nearby sugarcane fields or commute by public transport to other towns that have recently opened shopping centers.

At the time of the study, Mpumalanga Province had the second highest HIV prevalence in the country: 35.1 percent of pregnant women attending antenatal clinics and 14.1 percent of the general population were HIV positive (Shisana et al. 2014; UNAIDS 2012). Our conversations with local NGO workers suggest that the prevalence rate may be significantly higher. Unfortunately, regional awareness of the epidemic does not match its magnitude, and data on local beliefs show ongoing misconceptions about risk (UNAIDS 2012, 87). Despite government-sponsored antiretroviral programs, an estimated 58 percent of people living with HIV in South Africa did not have access to treatment in 2012 (UNAIDS 2012). In Mpumalanga, new infection rates have hardly fluctuated over the past decade, despite massive national treatment campaigns, increased access to medications, and greater awareness of HIV testing sites. Youth rates of infection are among the highest in the country (Shisana et al. 2014, 42). Although Mpumalanga has consistently had high rates of infection, it has not been the site of intensive research or intervention like neighboring KwaZulu-Natal.

Given the extraordinarily high rates of HIV in this region of South Africa, any discussion of health is implicitly or explicitly also about HIV. Since the early days of the epidemic in the region, place has been considered significant in the spread of HIV, particularly proximity to roads (Tanser et al. 2000). Proximity to clinics, support systems, and information remain central (Linard et al. 2012; Global AIDS Response Progress Report 2012). These vary widely across the country and are often obscured in larger population-level data. As Hunter (2010b, 25) writes, 'AIDS is embedded in under-researched social and spatial structures after apartheid'. While Hunter and other scholars provide insight into the social dynamics shaping

HIV management, there are few studies that consider the relationships between health and the environment. To expand the therapeutic landscape concept, we include relational dimensions of natural resource use in health management.

People's experiences with the therapeutic landscape of Ntunda are intimate, personal, and distinct. Nolwazi, introduced above, is HIV positive. She estimates herself to be fifty years old, but is not sure. She does manual labor at a farm, nearly ten kilometers from her home. She usually walks to and from work, from her dusty, gray 'stand' (a term used to denote a homestead and the surrounding property) to the contrasting green sugarcane fields. She is from Mozambique and cannot access government funds for social grants because of her inability to acquire a government identification card. To support herself and five other relatives in her home, she relies on this demanding farmwork and the little she can earn as a traditional healer. She collects herbs for healing and wood for cooking on her walks home in the evening. Frequently, she takes off work to collect her antiretroviral drugs or to take her son, who is developmentally challenged, to a clinic in another town. Nolwazi's quest for health for herself and her family utilizes every resource available from the structural, social, and natural environment in Ntunda.

Infrastructure

Postapartheid development in South Africa has been uneven across the country, dividing residents by geographic locations that intersect with class and racial dynamics (Cousins 2007; Hart 2002; Kongolo and Bamgose 2002; McCusker, Moseley, and Ramutsindela 2015). Geographically rural and marginalized areas continue to deal with unemployment and lack of social services necessary for household economies and health care, despite the end of nation-wide colonial and apartheid systems of racial classification and segregation. Rural areas were severely neglected prior to 1994, especially urban townships and the former bantustan territories that were intended to be the location for rural black populations, based upon ascribed ethnic identity (Jacobs and Hart 2014). Ten bantustans were constructed by the apartheid state as spatial containers for the rural African population, with each bantustan corresponding with what was deemed to be its ethnic homeland. Tribal authorities were recognized as the legitimate governance system within the bantustans, which gave chiefs power over land allocation and other administrative functions; some scholars assert that this legacy continues to shape development in the contemporary era (Ntsebeza 2000; Levin and Weiner 1997).

Following the 1994 democratic elections, bantustans were incorporated into the national infrastructure of South Africa and identified as areas needing economic investment to overcome decades of disenfranchisement. Under presidents Mandela, Mbeki, and Zuma,

various rural economic development plans were constructed, relying on a combination of state and nonstate funds. The government has made a commitment to 'redressing the legacies of unequal spatial engineering during the colonial and apartheid regimes' (Aliber et al. 2006 cited in Jacobs and Hart 2014, 161). The initial vision for economic development was the Reconstruction and Development Programme (RDP) that was the framework for the African National Congress (ANC) government. The RDP was followed by other programs that were explicitly neoliberal, including the Growth, Employment and Redistribution (GEAR) Act of 1996, which have dominated the national reconstruction landscape (Hall 2007, 2014). These programs set out to improve economic and living conditions across the country, with an emphasis on impoverished rural areas and many detailed plans for development. Since implementing these policies, the country has experienced massive growth in urbanization and improvement in living conditions, especially in formal housing (Jacobs and Hart 2014). Though delivery has increased, there is still a waiting list for services, including water access, sanitation, improved housing, and road infrastructure.

Therapeutic landscapes in this setting are a product of this spatial history. As one example, health care consists of two parallel public and private systems. The public system is comprised of tiered options, including often-underfunded community-level services, nurse-run primary care clinics, district hospitals with generalist physicians, and a sparse set of regional and tertiary hospitals with specialists (Chopra et al. 2009). In rural areas, residents can access individual private physicians for a fee, but generally rely upon local clinics, regional hospitals, and home-based care groups to receive basic health services (Uys and Cameron 2003). Within Ntunda, the absence of any clinic until 2015 meant that residents either pursued traditional forms of medicine, traveled to neighboring villages to access remote clinics, or neglected to pursue health care services entirely. Overcoming inequities in human resource distributions between the public and private health care system remains a challenge in South Africa, particularly due to multiple concurrent disease burdens (Coovadia et al. 2009). Poorer, rural, and black populations face barriers of distance, transportation, and lack of adequate services at health care facilities (Harris et al. 2011). It has been estimated that many low-income households may spend more than 10 percent of their household income on health-related transport costs (ibid.; see also Honda et al. 2015).

Ntunda is a rural village, formerly within the KaNgwane bantustan. The village has experienced uneven development and government involvement, evidenced through visible development programs and still-limited physical infrastructure. The tarred roads we drove down with Nolwazi have a few incongruous solar-powered streetlights and many homes

have water tanks, which are the envy of others in the region. However, at the time of our fieldwork, there was no clinic in Ntunda.2 Residents predominantly chose to attend two clinics in neighboring villages. Nomthandazo, a forty-eight-year-old woman, visited the clinic frequently for her own chronic health problems, including side effects from past tuberculosis infections, and was responsible for taking her grandson there as well. She was not formally employed and found the cost of traveling to the clinic to be burdensome. She said that they usually had to spend money to get to the next village: 'sometimes we get a lift from people that know us, but most of the time it's public transport'. Inconsistent and unreliable means of accessing clinics frequently led to inconsistent and unreliable clinic attendance. Without private means or funds, obtaining health care outside regular working hours was difficult, if not impossible, for most residents.

Though Ntunda has a paved road, without physical clinical facilities in the area, residents cannot tap into the national system. A village clinic has been under construction for several years, though the construction and planned opening were delayed repeatedly. Residents hoped that it would, eventually, make their landscape more therapeutic. Zodwa, a forty-year-old woman, moved to Ntunda from Swaziland six years before we met her, convinced by her older sons that there were opportunities for employment in the area. She has sold fried cakes door-to-door since coming to the area and her sons have found piecemeal employment. Just scraping by, they have had to choose between getting medication nearby or going for a full clinical visit. Zodwa said of the new clinic, 'Oh, yes it's going to be a big help because of not having a clinic here. Because if one of my kids is sick and is five years old, she needs to have R40.00 [about US$4] for transport to Skhwahlane. Most of the time you look at that kid, give her old treatment or buy from the chemist. Sometimes you don't even have that money'.

Discussion of the clinic construction frequently led to talk of a major issue in the area: jobs. Residents were critical that there were not more local people employed in the construction of the clinic and thought the local government should do more than provide grants as support. As one member of our research team pointedly asked, 'What good are the few streetlights when the majority of residents of Ntunda cannot find employment?' During focus group conversations with both men and women, regardless of the question asked, conversation inevitably turned to the widespread unemployment in the area. As one man in a focus group said, 'How can you get experience while you never work? You are always at

2   A clinic in Ntunda has since opened, in June 2015, and has significantly improved health care access for the region. The space is gradually expanding its operations to be open twenty-four hours a day, which has resulted in residents from other villages coming to the area for medical care.

home doing nothing'. Even for those with education, training, and experience, job opportunities were rare and difficult to obtain.

Unlike many other countries in sub-Saharan Africa, the government of South Africa administers seven long-term social support grants for residents. These include an old-age pension, a veteran's grant, a disability grant, child care and foster care grants, and social relief of distress grants. The most common of these is the child support grant, going to nearly twelve million recipients. This provides approximately US$30 per month to the main caregiver of a child under the age of eighteen, if an individual or couple's income is below the threshold given for all grants (AfricaCheck 2015; SASSA 2015). Distributed through the Social African Social Service Agency (SASSA) on a monthly basis, these so-called social grants are a lifeline for many households. Despite widespread social assistance, including RDP houses, economic disparities continue to grow in South Africa and the rand continues to fall in the global market.

Older residents in particular were careful to note that government intervention has changed recently. While they were not fully satisfied with services, their circumstances were markedly better than in the past. Nomthandazo, struggling with illness, explained:

> I see a lot of change because [before] I was poor and not even having a house, but the government has built a house for me. You can see the fence and the water tank – that is all the government's doing. I didn't have a toilet but now I have it and now they are building the clinic. I can see there is a lot of change.

She was too weak to work selling vegetables as she used to and relied on a government grant for her primary income, sending as much money as she could monthly to an unemployed son in another province. If the government grant were to stop, she said 'I will have a problem. . . . Now I'm doing nothing, so if the government cuts that little money that they give, because I cannot push the wheelbarrow and sell that – tell me, what can I do?'

While Decoteau (2013, 16) describes grants in other regions of the country as constituting a 'weak form of social citizenship' – used to cover up the government's failure to address service provision, unemployment and increasing inequality – this is not necessarily the case in Mpumalanga Province (see also Hunter 2010a). While it is true that the amounts distributed do not make up for the lack of employment, individuals want to be seen by the government and value the visibility afforded by any provision of social services. Very few of the households not receiving assistance criticized the program and many wished that they also qualified (some did not have national IDs and others were above the income threshold). The infrastructure of South Africa varies by region, but when present, it allows for some

opportunities to achieve and maintain health, whether through sustaining livelihoods or accessing clinics and medications. Ntunda is a rural town in the throes of change brought about by government programs, though despite the growing physical infrastructure, the lack of corresponding economic opportunities continues to exclude residents from participation in the regional and national economy. As a result, the therapeutic landscape for residents continues to be shaped by historical spatial dynamics that inform contemporary economic processes, social services, and resource commitments.

Social dynamics and stigma

The social landscape of health can be as significant as the physical. Social dimensions of health can include public health promotion campaigns, local discourses on health priorities, advice on decisions between various types of healing, and subjective experiences of illness. In South Africa, the history of AIDS denialism leaves a cultural legacy of silence surrounding HIV (Decoteau 2013; Fassin 2007; Jones 2005). This is in stark contrast to high prevalence rates and other markers of the illness on society.

Only the home-based care group in Ntunda, funded by United States Agency for International Development (USAID), had publicly visible signs related to HIV at the time of our initial fieldwork. Unlike other African countries that have had active public health campaigns, such as Uganda, the physical landscape in Ntunda reveals little about the social suffering from HIV. A short trip to nearby Swaziland changes the scenery dramatically. While the country has less physical infrastructure than South Africa, billboards for HIV prevention and awareness pepper the countryside at regular intervals. Even urban areas in South Africa have highly visible social marketing related to health; in one of the hardest hit areas of the country though, HIV remains under wraps publicly. Inside clinics, however, there is a concerted effort to integrate HIV treatment into primary care, and signs plaster waiting room walls advising mothers to get checked to prevent transmission during pregnancy and to promote healthy living. Successful scale up of treatment has significantly improved life expectancy in rural areas (Bor et al. 2013).

The distinction between inside and outside the clinic was reflected in the way that residents spoke about HIV. When asked about HIV in their community, residents in Ntunda gave mixed responses. Some acknowledged the presence of the disease and felt comfortable discussing it openly, particularly with friends or people from church. Nomthandazo said, for example, 'Yes, people are sick. We see each other at the clinic. . . . At the church they take care of me. I don't experience any difficulty with them'. This openness may have been for our benefit, as when probed, few residents spoke of personal experiences, preferring to make more general statements, as did Sipho, a fifty-six-year-old man: 'I only know that HIV

is healed at the hospital, anything about that I don't know'. Yet, in focus group discussions we were told, as one woman put it, 'most people are affected' in the community, and the high prevalence rates seem to corroborate this.

Other residents who claimed an openness regarding the disease still attached a strong stigma, including Zodwa, who said people in the area should 'stop being ignorant' to prevent infection. Knowledge of HIV as an issue was widespread, but blame and stigma were a persistent undercurrent in conversations related to the disease. This social dimension of health shapes the experience of living with HIV and decisions about whether to seek care. The pervasive stigma and denial inhibit social support and the reception of public health messages.

While reported as common in the region, traditional or indigenous healing practices face similar public stigma (King 2012; Decoteau 2013; Thornton 2009, 2010). Previous research by King (2012) in the same region has uncovered 'subaltern health narratives', showing that, despite intimate knowledge of various types of healing and use of medicinal plants, residents still had myriad reasons for not visiting traditional healers. The primary reason at the time of data collection fifteen years ago was religious faith; attending church and visiting *sangomas* (indigenous healers) were not socially compatible (or at least should not be seen as such). Given the massive rollout of antiretroviral treatment since that time, there is now an even stronger force driving the stigmatization and underground practice of traditional healing: biomedical clinical practices. When signing up for antiretroviral treatment at any health center in the area, patients must undergo counseling sessions related to positive living, health practices, and treatment adherence. These sessions malign traditional healing, and public health officials have made statements about its absolute incompatibility with biomedical treatments. In focus groups, residents reported that traditional healing was common, but types of illnesses were divided into those that would require the clinic and those that could be dealt with traditionally. As one woman, Busiswe, a fifty-six-year-old woman, pointed out, however, the decision was not always based on the type of illness. In her case, it was economics: 'Now if I feel some pains, I go to the clinic because even the money to see a *sangoma*, I don't have, but at the clinic it's free'.

Nolwazi has a son with learning disabilities; at age thirteen he was only in the second grade of primary school. She says he is sick frequently, but the clinic never addresses his memory and social functioning issues. Instead of taking the day off work, she tries to treat his illnesses with herbs, but has seen little difference. Her preference would be to combine healing practices, though this unfortunately is incompatible with the attitudes she has encountered at the clinic and the economic challenges her household faces. The biomedical

division of healing types, the uneven provision of government services, and poverty all deeply shape decisions about how and where to seek care in villages like Ntunda.

Finally, and significantly, the social, political, and historical context of South Africa changes the landscape of health, regardless of availability of infrastructure or resources. Even if health access for all is constitutionally enshrined, historically racist and urban-centric policies continue to inhibit poor, rural, and black residents from accessing health care (Coovadia et al. 2009; Decoteau 2013; Harris et al. 2011; Honda et al. 2015; Ridde and Morestin 2011). Racialized dispossession and forced resettlement shape where contemporary settlements remain today (Cousins 2007; Hart 2002; Kongolo and Bamgose 2002; McCusker et al. 2015). Stigma prevents all people from accessing the same information, and tensions and biases within the clinical space can make experiences of care inequitable (Airhihenbuwa, Ford, and Iwelunmor 2013). The village of Ntunda was contained within the former KaNgwane bantustan during the apartheid period, and its current infrastructure and social patterns are intimately tied to these histories of racial classification and spatial segregation. The legacy of discrimination deeply affects collective experience in tangible and intangible ways that can ultimately worsen health outcomes and health care.

Natural resources

In South Africa, social history is intimately tied to land use, ownership, and distribution (King 2011; O'Laughlin et al. 2013). Racialized dispossession and forced resettlement shape where contemporary settlements remain today (Cousins 2007; Hart 2002; Kongolo and Bamgose 2002; McCusker, Moseley, and Ramutsindela 2015). Large farms continue to dominate precious land, forcing small-scale landholders to purchase groceries to offset meager cultivation. The extraction and use of natural resources continues to have strong political connotations; historical and contemporary geographies shape livelihoods, health decisions, and availability of resources to offset health and household costs. As O'Laughlin et al. (2013, 4) sum up the paradoxes inherent in the region, it is clear that natural resources play a large role:

> On one hand, rural poverty across the Southern Africa region today has some common characteristics: declining wage labour opportunities relative to population size means that wage remittances can support many fewer rural households than in the past; small-scale agriculture is constrained by reduced levels of non-agricultural income to draw on for purchase of farm inputs, and by starkly unequal world market conditions. . . . On the other hand, rural poverty in South Africa today has features that make it unusual or extreme in the region. These include the significant, if declining, proportion of the rural poor who engage in wage labour on large-scale

commercial farms; the even larger numbers of households in densely settled areas under 'customary' forms of land holding, who lack access to arable land, do not own livestock and do not engage in farming on any scale; the predominance of non-agricultural sources of income for almost all rural households; the absence of vibrant rural markets and dependence on mass-produced commercial foods; and the increasing importance of cash transfers from the state (social grants) as key sources of income.

Residents of Ntunda use elements of their surroundings in multiple ways to enhance health and healing, including use of firewood, small-scale food cultivation, and herbal medicines. These are intrinsic components of health maintenance and are central to the therapeutic landscape in which residents are situated.

Nutritious and regular diets are crucial to minimizing side effects of antiretroviral medicines and maintaining overall health (Kalofonos 2010; Talman, Bolton, and Walson 2013). In fact, antiretroviral treatment produces hunger and creates food insecurity in ways that were not present in the region previously (Cousins 2016). There are no large grocery stores in Ntunda and food security was often mentioned as an ongoing struggle. A fifty-nine-year-old woman named Khethiwe had to stop her treatment because of her inability to access food, telling us: 'When I was sick it happened that I dropped out because I wasn't able to take it because I wasn't eating. I didn't want to take pills on an empty stomach'. Due to low incomes and the distance needed to travel for groceries, many families in Ntunda rely on small-scale gardens for their diets. Those with gardens grow maize, greens, nuts, and fruit. Unfortunately, water scarcity is common even for families with water tanks, and this can limit their ability to grow needed food. Busiswe described her family's distressing food scarcity, saying:

> We only survive with the child's grant. . . . We have a problem because we sometimes sleep without food because of not knowing where I can get food. . . . It's painful to live without food. Sometimes we all sit together and not knowing what to eat, sometimes the kids cry for me and I can't help them because we are not working. . . . Maybe if one of my kids can get a job that can help because that person can buy food for us.

The inability of families to supplement their resources with a garden led back to a reliance on government stipends and ongoing uncertainty. Regardless of HIV status, households in the region with low socioeconomic status or the death of a household member are more likely to experience food insecurity than others (Twine and Hunter 2011).

Larger-scale collection of natural resources can offset the costs and instability of electricity (Matsika, Erasmus, and Twine 2013; Tibesigwa et al. 2016). The majority of homes rely on wood for cooking, despite the availability of electricity. Using a wheelbarrow or carrying materials on their heads, residents and their children search the nearby bush and other areas to find dried wood. Relying on local knowledge, passed down among families about which types of plants are the best, they select trees that are safe for food preparation. Busiswe explained, 'There are trees that smell bad when you cut it; when you cook with it, it will smell and [therefore] people do not use that plant'. While some residents bemoan the scarcity of wood and the increasing distance needed to travel to find it, others laughed at the possibility of wood ever being scarce, saying the bush is a huge place (female focus group participant). Some fear isolation in the bush because of stories of rape occurring while collecting wood and others say that snakes are the main issue. Nonetheless, the collection of wood and other natural resources, such as medicinal herbs and building materials, continues on a daily basis to promote healing, offset other household costs, and connect residents to the local environment. One family goes every weekend as part of their chores: 'I go with my kids on Saturday. . . . We go far some days, but we also go nearby because we are carrying it with our heads' (Zodwa). Those who said they had to travel far pointed to a shortage of dry wood near their homes. Some areas are open, but have been over harvested; others are limited by local conservation efforts and restrictions that do not allow living trees to be chopped down.

Indigenous medicine exists alongside biomedicine in this area and while spiritual forms in particular are publicly maligned (King 2012; Decoteau 2013) and counseled against in clinics, as mentioned above, many still collect herbs and use natural resources to heal everyday ailments, such as the flu and diarrhea. Residents are able to distinguish various forms of indigenous healing and selectively combine them with biomedical treatment, typically through the use of home-based herbal treatments. They collect leaves from their gardens or buy dried herbal medicines from the local market, and others use special tea from churches to treat physical and spiritual illnesses. Even those residents in our study who said that they would not go to a *sangoma* for treatment admitted that, in their own homes, they use herbal remedies as a first line of treatment. In one focus group, one man explained, 'When a child is born we give them trees before Western medicine. We use trees for the diseases that you see that you can heal with trees. It is far to go to the doctor because it is expensive. You cannot pay R200 when you can cut trees'. These health beliefs are deeply rooted in and dependent on local ecology, as well as economic opportunities in the area.

Nolwazi trained as a *sangoma* at her home in Mozambique. She believes that HIV is curable through the use of traditional medicine, though she herself was too sick when she found out she was HIV positive to make a difference. She spoke at length about combining her medicines and how the clinic tells them not to; she listens, but she believes that they can

really work together and frequently collects plants for medicine in secret. She said there are many barriers and restrictions that limit her collection, 'Now is difficult. There is a man that is looking around the bush; if he finds you digging *muthi* [medicinal herbs] without the badge that shows that you are a *sangoma*, he catches you'. Instead she picks up herbs and plants as she sees them on the side of the road on her way to or from work. She can put small amounts in her pockets without being noticed.

The collection of herbs, cultivation of food, and collection of firewood are all integral to the therapeutic landscape of Ntunda. These resources are essential for livelihood maintenance, and frequently the effects on the natural environment are of secondary concern. Unsustainable firewood collection can lead directly to deforestation, and has in some parts of the region (Matsika et al. 2013). Some areas where Ntunda residents collect wood are in private reserves, and they are careful to collect only dried branches. Despite efforts to increase conservation in the region, the lack of economic opportunity continues to drive resource collection to offset household costs and meet subsistence needs (King 2011, 2012; Twine 2005; Twine, Saphugu, and Moshe 2003). Nearby regions have annexed surrounding areas for wood, motivated by 'institutional control, levels of unemployment and local perceptions of rights and responsibilities since democratic elections' (Twine 2005, 93). Conservation efforts in the region rarely take into account local communities, sometimes cutting them off from vital resources for the sake of top-down land management approaches to controlling deforestation (Knieter 2014). In a nearby area, increased collection of resources was found to be linked to unemployment and a sense of entitlement to access the resources (Twine et al. 2003). Due to the historical disenfranchisement of the area, residents felt that they were owed use of the land to sustain their livelihoods. While transnational movements in sustainability and conservation encourage the reduced reliance on natural resources, current living conditions can make such change difficult, if not impossible in places like Ntunda. Instead, residents face a 'double exposure' to market-driven change and environmental change (Ogden et al. 2013).

Conclusion: Landscapes as overlapping experience

Using a therapeutic landscape lens, the significant features shaping Nolwazi and others' health experiences in Ntunda become clearer. The village and those surrounding it were generated out of particular political and economic relationships that were created with the construction of colonial and apartheid systems of spatial segregation. Unequal provision of health care services within these areas has resulted in a locally specific landscape in which clinic access remains a long-standing issue. While investments in the Ntunda clinic and home-based care groups provide more opportunities for those seeking care, residents remain constrained by their resource needs. Local notions of health, and specifically of HIV, shape

decisions to seek care and support, either through the perpetuation of stigma or social support.

Therapeutic landscapes are produced by the interplay between infrastructure, social systems, and the natural environment, as seen in people's use of indigenous healing practices and natural resources. These practices can supplement and offset health costs through the use of gardens, medicinal herbs, and wood. Their collection and use occurs within the landscape in which health is experienced and managed, and as such contribute in shaping the therapeutic landscape of Ntunda.

All of the above dimensions of health have points of intersection with each other, with the clearest example being medical pluralism. In many parts of South Africa, this medical pluralism is closely linked to the natural environment and is inextricable from the broader therapeutic landscape (Thornton 2009, 2010). As Thornton (2010, 145) writes of another setting in South Africa, people 'seek healing in a way that is like acquiring goods at a market: they seek knowledge about what is available, evaluate the goods on the basis of some criterion, make selections and pay a price'. This approach to health can include biomedical, folk, indigenous, and social criteria for selecting health care. Similarly, we show that even these 'natural' resources and their uses are shaped by government policies and historical legacy. Unemployment and poverty lead to reliance on firewood and medicinal plants, while infrastructure such as paved roads allows some residents to access broader opportunities. This uneven economic development leads to what Horbst and Wolf refer to as 'unequal place-making' (2014).

Our research shows that the Ntunda landscape is not necessarily a therapeutic one. Rather, the landscape is an 'inscribed space', created through its bidirectional relationship with people (Low and Lawrence- Zúñiga 2003). As a result, human action 'writes' on to the environment in an enduring way. While Low and Lawrence- Zúñiga write of inscription as the process of transforming place into space, the case of Ntunda shows that inscription transforms human experience as much as it does the physical environment. The unique history of South Africa and particular policies and practices in Ntunda change the space and, in turn, shape residents' experiences with the multifaceted dimensions of health and health seeking.

In order to capture this complexity, we advocate an interdisciplinary approach to studying therapeutic landscapes, incorporating the strengths of geographic and anthropological approaches. Geography offers literature on the political ecology of health (Hausermann 2012; Jackson and Neeley 2015; King 2010, 2015), which incorporates the natural environment into discussions of livelihood and health. There is anthropological strength in understanding subjectivity and the experiences of health and health seeking. As Low (2011,

390) advocates, 'spatializing culture—that is, studying culture and political economy through the lens of space and place—provides a powerful tool for uncovering material and representational injustice and forms of social exclusion'.

While the physical environment and structural issues have created a locally specific experience of landscape, the residents of Ntunda remain tied to enduring health inequalities in South Africa, and for some, the Ntunda landscape is not therapeutic because it fails to meet their health care needs. Health in Ntunda cannot be extricated from the physical and social dimensions that create it; part of broader 'cartographies of health' (Schrecker 2014), it is influenced by global processes of development and discourse.

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About the authors

Margaret Winchester, PhD, is a research associate in the Department of Health Policy and Administration at Pennsylvania State University and the coordinator of the Pan Institution Network for Global Health. Her work has centered on HIV, health care access, and vulnerability, primarily in Uganda and South Africa. Currently she is working on several other projects, including with informal workers in New York and India.

Brian King, PhD, is Associate Professor in the Department of Geography at the Pennsylvania State University. His research interests concentrate upon the impacts of conservation and development within southern Africa, social and environmental justice, and health–environment interactions. His recent work has extended into other thematic areas, with two separate projects examining how environmental variabilities shape livelihood responses in the Okavango Delta of Botswana, and how social and environmental systems in South Africa are being transformed by HIV/AIDS.

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