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Article

Living in a Cage: The Intimate Geographies of Conservation in South Africa and Tanzania

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Abstract

National parks are socially produced conservation spaces that shape the lives, understandings, and behaviours of the men and women who live and work within them. This article draws on 18 months of comparative ethnographic research with men and women who are employed and reside inside in protected areas in northern Tanzania and South Africa's Kruger National Park. Protected area management decisions regarding the migration, isolation, concentration, and living arrangements of employees combine with structural forces of relational material inequality and varied understandings of gender relations to produce geographies of intimacy that shape both perceptions and patterns of sexual and emotive behaviours in powerful, and potentially troublesome, ways among conservation actors. Although the specific configuration of this constellation of forces is context dependent and unique to each location, there are also discernable similarities across national context. Given the human resource intensive nature of conservation, these findings have direct relevance for the future success of national parks in both countries and for conservation more generally.

Keywords: Conservation, health, South Africa, Tanzania, HIV/AIDS, political ecology, masculinity

INTRODUCTION

'For most people, the living quarters here in the park is like living in a cage,' Douglas[1] casually remarked as we walked through the large, green, iron gate and into the staff living compound of the Skukuza Rest Camp, in South Africa's Kruger National Park. Moving through the compound towards his room, we passed row after row of khaki buildings with two or three rooms per building, where Kruger's less prestigious, less educated, less skilled, less well paid, and nearly exclusively black employees live in close proximity, isolated from their families.[2] Each staff member is allocated a single room, roughly 9ft x 9ft, in which they sleep, dress, cook, clean, store all their belongings and food, drink, have sex, and express all the emotions which comprise the human condition.[3] Since there are no cooking facilities in the rooms, people improvise as their lives spill out into common areas, setting up make-shift kitchens both inside and outside of their rooms. Bathrooms are communal, demarcated by gender, and are in separate buildings from the rooms.[4]

Douglas' comment foregrounds the outwardly visible manifestations of spatial control: the large iron gate, which closes at night sealing inhabitants in and wild animals and all others out, the large manned boom, that controls access during the daytime hours; the 8 ft tall brick walls and foot traffic gates, which serve to further funnel and control the movement of bodies; and the wire fences, which separate the several hundred inhabitants of living quarters from other parts of the tourist rest camp and facilities in Skukuza, the largest settlement inside Kruger National Park (KNP).

Seemingly mundane moments with park employees such as this regularly punctuated this qualitative research regarding health-related perceptions and behaviours among conservation area employees in both, northern Tanzania--specifically Lake Manyara, Tarangire Serengeti National Parks, and the

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Ngorongoro Conservation Area--and South Africa's Kruger.[5] After leaving the compound that day, I realised that Douglas' comment was not entirely directed at the visible material manifestations of control. Rather, he was also speaking of a metaphorical cage, one that, in both spatial and structural ways, shapes the understandings, behaviours, and life chances of those who live within the walls and fences of the staff compound.

Although the isolated living conditions of park employees in northern Tanzania differ in important ways from the Skukuza staff living quarters (more remote, fewer people, more predominantly male), they also share important commonalities (aggregations of isolated individuals who have in-migrated for employment, are separated from their families for long periods, and earn stable salaries in larger social environments with limited employment opportunities). Building on Douglas' comment, this article develops a comparative analysis of how specific dynamics of conservation in both countries shape heterosexual intimate relations and health-related understandings and behaviours in ways that are both dependent on and transcend context.

Drawing on Stoller's notion of complex geographies of intimacy (2006), this work contends that fortress conservation's spatial dynamics and regulatory strategies combine with structural forces of material inequality and embodiments of masculinities and gender relations to produce intimate geographies of conservation; places in which socio-spatial dynamics shape patterns of sexual and emotive understandings and behaviours of conservation professionals in ways that facilitate, rather than impeding, potentially risky intimate behaviour, possible disease transmission, and patriarchy. After situating this work in relation to two relevant bodies of literature and introducing the methods, these dynamics is further discussed. The article concludes with a discussion on why such a nuanced understanding of the intersections of national parks, spatial governance, and health is worthy of consideration for both academics and conservation professionals.

Social Relations of Conservation, HIV/AIDS, and Conservation: Setting the Stage

Several scholarly perspectives examine various components of the social dynamics of conservation and large scale organisations and build the scaffolding for this work. This relevant background section introduces the two most central academic lineages. First, the relevant scholarship emerging out of political ecology is briefly outlined. Then a body of health, intimacy, and HIV-centric scholarly and grey literature emerging directly out of the conservation industry is introduced. This innovative research intervention synthesises insights from both bodies of work and applies these frameworks in both a unique comparative manner and with a level of depth that exceeds previous examinations of the intersections between HIV and wildlife conservation. In doing so, it contributes a new and important perspective to the examination of parks and people.

In the past quarter century, political ecology has contextualised and complicated understandings of the material and discursive relationships between conservation projects and people living in or adjacent to such protected areas (for overviews, see Igoe 2004, West et al. 2006). Much of this people and parks literature examines the consequences of conservation projects for adjacent or displaced communities (e.g. Walley 2004; Adams and Hutton 2007; Agrawal and Redford 2009) and scholars convincingly document how conservation initiatives profoundly disenfranchise, marginalise, and impoverish people (Goldman 2003; Igoe 2006; Buscher 2013).

While a plethora of protected area studies that examine the social impacts of conservation on communities located adjacent to, displaced from, or inside of protected areas (see McCabe et al. 2010; Goldman 2011; Neves and Igoe 2012); far less scholarship examines the ways in which conservation initiatives impact those people working inside the conservation profession (Meskell 2005; Garland 2006, 2008; Reid-Hresko 2014).

Following Beirsack's (2006: 3) insistence on, 'how power relations mediate human-environment relations,' Garland's work in Tanzania positions wildlife conservation within larger systems of global capitalist production, traces the emergence of performative conservation subjectivities, and details the consequences of such subjectivities for how protected area actors understand themselves and their relationship to their chosen profession and other people. In the same vein, Haenn's conservation research in southern Mexico attends to the ways in which conservation ideals do not always align with how conservation actors understand place and their relationship to it (2005). Her more recent work (2016) examines the social dramas that arise in conservation settings when conflicting narratives and identities are deployed in environments saturated with power inequalities. Sodikoff's scholarship in Madagascar adds a final political ecological buttress to the scaffolding for this work, grounding the social relations of conservation in a reworking of Marxian political economy (2012). She recognises the centrality of labour for protected area endeavours and traces how, 'people make parks accommodate their own cultural mores,' (2007: 17). Together, these authors examine conservation as an enterprise that both impacts and is impacted by those people staying and working within them, not those living adjacent to or displaced by them. However, as important a foundation as they lay; these works do not examine the ways in which conservation projects shape health and intimacy-related phenomena within their borders. This research does precisely that, contributing a new and important perspective to the conservation literature.

Secondly, a small body of academic and grey literature scholarship examines how the risk of and contraction of HIV/AIDS shape how people interact with and rely on their surrounding natural environments, including the intersections between wildlife conservation and HIV/AIDS. This work includes examinations of HIV/AIDS and livelihoods in areas with conservation projects (Torell et al. 2006); the relationship between HIV/AIDS and forests in sub-Saharan

Africa (Timko et al. 2010); the ways in which existing conservation infrastructure can be used to respond to the pandemic (DeMotts 2008, De Souza et al. 2008); and how conservation organisations are responding to HIV/AIDS within their organisations (Reid-Hresko 2014). For this discussion, the most important precedent is King's research in South Africa, which examines the political ecologies of health and HIV/AIDS (2010). He asserts that political ecological frameworks can be used to bridge the health and ecology research divide by, "showing how health is situated within political, economic, cultural and environmental systems that intersect to shape the spread of disease and decision-making options available to human populations," (2010: 49). By examining perceptions of and behaviours around intimacy and disease transmission within conservation settings, this work does just that and broadens the literature regarding the various impacts of conservation initiatives.

Lastly, there is also a body of grey literature, coming directly out of the conservation sector; that mobilises tropes of loss and crisis, to document, among other things; the profound losses to the conservation sector imposed by the pandemic (Oglethorpe et al. 2013); how HIV/AIDS shapes environment/human interactions, including in and around protected areas (Bolton and Talman 2010); and the ways conservation organisations can respond to the pandemic (for example Oglethorpe and Mauambeta 2008). Following the clarion call issued by Hunter et al. (2008: 107), who contend that, 'little academic research has been done thus far on AIDS and conservation linkages,' this new work examines how the spatial and structural components of conservation shape intimate practices, understanding, disease risk, and health-related behaviours.

METHODS

Overview

The research presented here was collected during 18 months of ethnographic field work, in 2009-2010, and was conducted in Tanzania's Lake Manyara, Tarangire National Parks, the Ngorongoro Conservation Area, and South Africa's Kruger National Park. Together, this involved 125 semi-structured interviews with conservation workers from a variety of positions in the industry hierarchy and professional safari tour operators. In both locations, several hundred hours of ethnographic observations in the working, living, and relaxation geographies of conservation professionals, documented in on-site field jottings and daily field notes, were used to triangulate and corroborate interview data (Emerson et al. 2011).

Qualitative research in Tanzania occurred both inside and adjacent to conservation areas because the intimate geographies of the country's conservation professionals traverse the boundaries of these protected areas and extend out into the surrounding communities. With the assistance of a gate keeper research facilitator, also a local conservation professional, 56 semi-structured interviews were carried out. The interviews were conducted with both national park employees and professional safari driver-guides, who spend a great deal of their professional lives traversing these geographies of intimacy, in a mix of Swahili and English. The language, locations, and timing of each interview were dictated by the respondents. Tanzanian interviews conducted in Swahili were jointly translated and transcribed by the author and the research facilitator to ensure accuracy and reliability.

Although national park and conservancy employees in northern Tanzania's savannah grassland national parks mostly live inside of protected areas, their proximity and interactions with nearby communities are quite varied. Lake Manyara National Park is directly adjacent to the sizeable community of Mto Wa Mbu. Staff quarters in Tarangire National Park, on the other hand, are quite a bit more remote and the opportunity to head to nearby communities only occurs on weekends or days off. Ngorongoro Conservation Area is also fairly removed from nearby communities, but has both Maasai communities and significant tourism development within its borders. Consequently, the social networks traversed by conservation professionals in northern Tanzania are varied, but mostly occur in relation to proximate external communities, in contrast to the rest camp of Skukuza, in Kruger National Park.

In north-eastern South Africa, similar qualitative work was conducted in and around Kruger National Park in 2009-2010, with follow-up visits in 2013, 2014, 2015, and 2016. Semi-structured open-ended interviews were carried out in English with 69 conservation professionals working inside Kruger National Park and with conservation professionals engaged in on-going tertiary conservation-related education at the Southern African Wildlife College, located inside the official boundaries of Kruger National Park. A large number of employees live within Kruger National Park, approximately 2,500 when one also counts concession employees and short-term contractors. They live within various settlements located within the park. It was in these settlements that this research was primarily conducted. Roughly 1000 employees, although this number fluctuates a bit as short-term contractors come and go, live adjacent to the main rest camp of Skukuza, the largest concentration of employees and tourists in the park. This significant concentration of people shapes interactional dynamics in profound ways, so although research was conducted throughout the entirety of the park, it was in Skukuza that this research was most heavily focussed.

Participant Selection and Recruitment

In both settings, research participants were predominantly men (51 of 56 in Tanzania and 48 of 69 in South Africa). This reflects the over-representation of men in both countries' national parks systems.[6] Participants were all either Tanzanian or South African, representing a diverse group of ages (23 to 68 years) and professional statuses (from high level conservation managers to field rangers to hospitality and cleaning staff). Given these characteristics, the respondent

pools reasonably reflected the make up of conservation-related workers in both locations.

In both settings, a non-probability referral-based sampling procedure was employed. This made methodological sense because each respondent needed to be actively employed within a protected area. With the exception of some hospitality and human resources employees, each participant had tertiary training from a wildlife conservation college: in Tanzania that is either the College of African Wildlife Management or the Pasiansi Wildlife Training Institute; and in South Africa it is invariably the Southern African Wildlife College.

The isolated nature of these research participants working inside protected areas meant that a purposive chain referral sampling procedure was the best way to ensure data saturation (Penrod et al. 2003; Orner 2006; Roura et al. 2009). Additionally, the author is a South African National Parks' (SANParks) affiliated researcher, which further facilitated and legitimised access to research participants. All interviews occurred in a comfortable, secure location of the interviewee's choosing and were digitally recorded by the author after securing informed consent from the participant; confidentiality of interview data was assured and maintained throughout the research process.

Data Analysis

Contemporaneous concept matrices, an existing qualitative approach previously used to examine HIV-risk perceptions and behaviours in sub-Saharan Africa (Needle et al. 2008; Reid-Hresko 2014), were developed during the interview processes to enable the fine-tuning of the interview schedule and to facilitate initial comparative analyses. Interviews and field notes were subsequently coded in the software package, *Atlas.ti* (Pope et al. 2000; Thomas 2006). Using *Atlas.ti*, codes were organised into code families within a large code-book to identify inductive thematic patterns within the 125 qualitative interviews utilised in this work.[7]

CONSERVATION GEOGRAPHIES OF INTIMACY IN TANZANIA AND SOUTH AFRICAN PARKS

Conservation projects in eastern and southern Africa bear the indelible marks of their colonial pasts. Like other resource-based industries, mining perhaps most importantly, patterns of isolated migrant workers and disrupted familial dynamics have attracted commercial sex workers and promoted transactional sex (Campbell 2004). Also akin to mining, it is not the goals or specific activities of conservation that are directly tied to embodied understandings, sexual behaviours, or disease transmission. Rather, it is the strategies and mechanisms through which such goals are enacted, like the isolation and concentration of employees in remote settings that links conservation to disease transmission.

In some ways then, this work is closely aligned with long-standing circular male migrant disease transmission models that trace the contraction and transmission of STDs from industrial resource extraction projects back to rural homesteads (e.g. Ramphele 1993; Carstens 2001), but is also complicated by changing political economies that have resulted in the growing mobility of women in times of high unemployment (Hunter 2007, 2010). In both settings, significant numbers of women have migrated to the parks and their surroundings in search of employment and livelihoods, which has direct ramifications for the constellation of spatially-bound social and structural forces that shape heterosexual intimate understandings and behaviours in patterned ways.

This section details three primary spatial and socio-structural forces, which together shape the geographies of intimacy for conservation actors working in national parks in South Africa and Tanzania: 1) controlled borders that heavily regulate the movement of bodies; 2) the subsequent isolation and concentration of employees; and 3) the ways in which socio-economic inequality and hegemonic masculinities intersect within these geographic contexts to rework patterns of intimacy for conservation professionals.

Fortress Conservation

Implicit in the very fabric of contemporary conservation goals of protecting landscapes and species is the need to limit the ecological impacts of humans within protected areas. Although the specifics of the manner in which this occurs in South African and Tanzanian national parks are not identical, both embody spatial manifestations of fortress conservation (Hulme and Murphree 1999; Brockington 2002; Hutton et al. 2005). Access to the protected areas where this work was conducted is heavily constrained by entry gates manned by men and women, some of whom have access to weapons and all of whom have the power to deny or allow entrance at will. These fences and the control of the movement of bodies in and out of protected areas constitute spatial practices central to fortress conservation (Anthony et al. 2010).

Kruger is fenced in, although the location of the fences is shifting as the park incorporates bordering private, provincial, and community-owned game reserves within the fenced area. The tell-tale fences of fortress conservation are absent from northern Tanzanian national parks, due in part to; 1) the conservation corridors based on the large migratory paths of animals, which extend past the boundaries of the parks; and 2) the customary grazing rights of the Maasai pastoralists, some of whom (ever fewer by the year as they continue to be forcibly evicted by the state) live inside the Ngorongoro Conservation Area (McCabe et al. 2010). Although research into the deleterious effects of fences and fortress conservation have focussed on those evicted from or living adjacent to such conservation areas (Neumann 1998; Brockington 2002; Siura 2006; Anthony et al. 2010), these policies also impact those working within these protected areas. Geographies of intimacy are influenced, at least implicitly, by the ability of various actors to choose with whom and where they have sex and/or fall in love.

This research focusses on heteronormative relationships, which may or may not occur within the context of marriage, be stable, or concurrent. When a socially produced regulatory barrier is placed between partners, the ways in which intimate relations are pursued and maintained is impacted. As one KNP park employee asked, 'If we cannot come and go as we please, how can we choose our relationships freely?'

In both conservation settings, most non-management employees either work 6 days on and one day off or one month at a time with a few days leave at the end of the month. Conservation professionals in Tanzania come from all parts of the country to the parks of the northern safari circuit as do their South African counterparts in relationship to Kruger National Park (although most lower level staff in Kruger come from areas less than 50kms away from the park boundary). Given the geographic enormity of both countries and time consuming travel logistics, a single day off each week or a few consecutive days off every month is often insufficient time for employees to travel home, see their husbands, wives, and families, and then return to the park in time to resume work. Responding to a question about the perceived drivers of disease transmission, a park ranger in Kruger put it this way:

> 'If you work for a month, its one and a half days leave accumulated. Or maybe you work for six days and then you get one day off. The problem is, when you work six days and get one day off, where are you going to go? How are you going to go out [of the park]? You wake up in the morning and you are just here. That is the root of the problem.'

This is compounded by the fact that most staff need to arrange their own transport in and out of the park and most lower level employees do not own vehicles. These obstacles to mobility result in extended periods of familial isolation and the concentration of bodies in socially produced, but completely arbitrary workplace-centered living environments that shape the intimate behaviours and emotions of those living in these parks.

The Isolation, Concentration, and Mobility of Bodies

In order to enforce the parameters of fortress conservation and simultaneously provide tourism and hospitality services, a significant number of people, many of whom have some degree of tertiary training, must be located in particular places within protected areas. In both settings, this leads to the concentration of staff in isolated locations, whether it be ranger anti-poaching teams, conservation scientists working and/or researching in the parks, technical services, or hospitality and tourism services.

As one hospitality manager in Kruger put it:

> 'if you look at how our communities in the park are organised, for many employees it consists of living quarters where people come and live, but it's not a family that live there. Its individuals who have families elsewhere. So you have an isolated community of strangers from all over.'

This sentiment was echoed by a middle-aged male ranger in a Tanzanian national park, who commented, 'This area is an isolated place, let's say like an island, where people cannot come in or out at will without a permit. The people who live inside the park live together because of work. Nothing more. This is where problems start.' In both settings, men and women, removed from the social ties that bind them to family and communities, live and work with people who, at least at first, are strangers to them and they often do so for years on end.

Isolating and concentrating bodies produces context specific geographies of intimacy that impact health-related understandings and behaviours, though this dynamic unfolds somewhat differently in each setting. In KNP, due to greater gender parity and larger concentrations of people, this extended isolation from family often leads to the development of intimate relationships within the park; while in northern Tanzania, it pushes the staff, predominantly male who work inside the park, out to adjacent communities.

Inside Kruger, as previously noted, less skilled and lower paid workers live in a living compound without individual bathrooms or cooking facilities. Yet, all of one's belongings and activities are confined to (or just outside of) this space, or in the shared bathrooms or kitchen facilities. In the concentrated Skukuza living quarters, there are upwards of 500 people living directly next to each other, sharing the communal spaces where they engage in daily routines and lead their lives. As one older male KNP long-term employee stated:

> The living quarters involve a very small room where people have to do everything. People are living alone right next to other people they don't really know. People are lonely. Here they work and sleep, work and sleep, and during the weekend maybe they've got a few hours off, say from 12pm on Sunday until Monday morning, when they don't work. What do they do? You think a lot of your wife for two or three months, but she is at home and then there's another wife, her husband is at home, and she is working there by the communal kitchen. You think, 'Oh, I do think I could go for that woman.' Or that woman will go for that man. People just take what they can get from the other. That's why I say, HIV can come through people exchanging life with unknown people.

Here the intersections of isolation, concentration, intimacy, and health behaviours within conservation settings become evident. The strategies of fortress conservation and its attendant management of bodies lead to particular spatial arrangements and it is these arrangements that are at issue: as one senior female management employee succinctly put it, 'the entire social life has been disrupted. I don't think that the problem is wildlife conservation itself, the problem is the way that people are living here.' How and where people are organised and concentrated in protected areas are choices made by park management that appear to produce unintended consequences that may threaten the very goals of conservation.

Similar to most employees in KNP, Tanzania's northern national park employees tend to live in small isolated clusters

that are predominantly composed of men, almost all of which are inside conservancies. Like Kruger, these men are also very often at long distances from their families; and returning home on their limited time off is not a possibility. As one middle aged male ranger expressed,

> 'To live alone is really hard. If you stay far from your family, it is a big problem. After a while, you can be convinced to do something [engage in intimate relations with someone nearby] because if you are staying here and your wife is living somewhere else, what else do you think will happen? Being far away from home is where the problems begin.'

So, in this way, the dynamics surrounding the need for trained conservation professionals from across the country to live in very specific places is similar to KNP.

However, in other ways the situation in Tanzania is markedly different from that of Kruger. The prolonged isolated cohabitation of men, relationally larger salaries in comparison to the general population, and access to vehicles relative to their South African counterparts, means that many Tanzanian park employees, especially those higher up in the hierarchy, have the ability to leave the parks more frequently. Most often, they go to adjacent communities, including Karatu, Mto Wa Mbu, or Kibaoni Tarangire, to relax and enjoy themselves, which often involves alcohol and intimacy. As one middle-aged male ranger expressed:

> 'It is only men who are working there [in remote sections of protected areas]. They have worked there for three months and they don't leave [during the Great Migration of wildebeests], so when they do manage to leave the park, they go and take beers and Konyagi [a local liquor] and then they don't have any eyes. So they will just take the first lady that comes. They have no eyes, you know, so they just take whatever they can get and this is one of the ways that people get HIV.'

The combination of extended isolation and attempts to overcome such isolation through re-entry into social environments, alcohol, and desire becomes a potent combination for potentially dangerous health practices. Thus, an exploration of the geographies of intimacy in northern Tanzanian park settings means accounting for the increased mobility of conservation actors, relative to most of their counterparts in Kruger.

The protected areas of northern Tanzania are located along the only stretch of paved road leaving the gateway city of Arusha to the northeast. This road is a main thoroughfare for people involved in a variety of activities and the transport of goods of all kinds. This varied commerce and the adjacent location of protected areas, where workers earn relatively high salaries, has resulted in the growth of several towns along the road that cater to travellers, business people, and conservation workers. Each town possesses a number of informal eateries and drinking establishments where conservation professionals go to relax and enjoy themselves when they have a day off. Some women from surrounding areas come to these towns hoping to capture a bit of the revenue passing through by spending time with conservation workers, working in a variety of businesses in both the formal and informal economy, or participating in either one-off transactional sex encounters or establishing more long term stable partnerships that are acted upon on a regular, though perhaps infrequent basis (Reid-Hresko 2014). A middle-aged male conservation professional put it this way:

> Karatu is on the main road to the parks and it is a destination place. It is a tourism center and also a stopover for businessmen. It is a favorite place of national park workers. When they come, they like to socialise, take drinks, and eat grilled meat. When you are socialising with them, you can see that most of them are liking ladies. Even if you sleep there today you can see how ladies are just roaming at night around in the streets and bars looking for these men. That is the situation with HIV.

This makes it appear that the standard sexual interaction is a single encounter facilitated in male-dominated drinking establishments where women come to pursue such relations. However, a number of health NGO workers, HIV activists, and bar matrons in Karatu also spoke of the frequency with which national park workers enter into stable, committed, and caring extra-marital relationships with local women. Instead of pursuing the random casual encounter, these men and women regularly spend time together when the man has a night or two off from the park, but not enough time to return home to his primary marital spouse, who would typically be located much further away.

Within larger contexts of the political economies of East Africa, these findings are relatively unsurprising, having been documented as long ago as 1990, in White's *The Comforts of Home*. What is unique to this analysis is evidence that similar dynamics are also present in these wildlife conservation settings.

In both settings, the regulation of social dynamics within protected areas facilitates potentially risky health behaviours, as conservation grey literature has documented (e.g. Oglethorpe et al. 2013). These complex dynamics were summed up by a young male Tanzanian ranger:

> For those of us working in parks, we are vulnerable because of living inside the parks. Your family is living somewhere far away. If you're not living with a family, with your wife, it is easy to get tempted. So, as people who are living in the parks, I think that this is a big problem for us. When we have a day off from the park, we come late and spend the night here in Karatu. You have maybe three months without seeing your wife, so it is easy to look around. Some men like girls from the bars and others have girlfriends. Either way, the risk is there.

Masculinities and The Materiality of Everyday Sex for Conservation Professionals

In both South Africa and Tanzania, context-dependent processes of exchange shape intimacy. In the South African context, Mark

Hunter has demonstrated how political economy helps shape patterns of both the material and emotive components of intimate behaviours and understandings (2002, 2007, 2010). In Kruger, there is significant relational income inequality among large numbers of men and women living and working together. Some men earn quite a lot as do a handful of women. Yet, there are also both men and women who earn very little. These dynamics, in conjunction with both historical and emergent gender-based rights and relations, shape material patterns of intimacy in ways that are markedly different from conservation spaces in Tanzania, where it is overwhelmingly men who are employed by the park and earning significant salaries in a social environment of relative gendered deprivation.

For most of the last two centuries, but particularly in the twentieth century, the intersections of political economy, racial oppression, and gender rights have shaped South African heterosexual relationships around what Hunter (2010) terms, the patriarchal bargain and dynamics of provider love. Men left rural homesteads to pursue employment, often in the mining or industrial sectors, while their wives stayed at home to maintain the rural homestead and tend livestock. As long as men sent remittances home to ensure that women could support their rural families, this was a workable arrangement. However, the intersections of the end of Apartheid, a concurrent tremendous rise in unemployment and the new South African Constitution, which enshrines gender-based rights for all, have markedly reshaped this dynamic. Signalling an end to the patriarchal bargain, women are now migrating *en masse* since many men can no longer uphold their side of the bargain – consistent, adequate remittances. Fidelity was, in large part, maintained through processes of material exchange, in particular the payment of bride wealth (*ilobolo*) and remittances, but those material structures have become unsustainable in the era of high chronic male unemployment. Now both men and women are free to mobilise their relative material wealth to secure intimate partners.

Inside KNP, there is significant income variability and some men use that relational inequality to establish patterns of intimacy. As one mid-level, 45-year-old male conservation manager stated:

> Inside the park, if you want to catch a fish, you must put a worm on the hook. So older men, normally, they don't like to sleep with old women. For them, they look for a younger woman who's after money to say, 'OK, there's some older guys who say younger women are the best.' They sleep with these younger women in exchange for something. Then they feel they are getting strong. They don't like sleeping with an old woman who's tired, because her blood doesn't flow nicely.

Follow-up questioning revealed that this something referenced above that men provided in exchange was not necessarily money, but more often material objects: food, transportation, cellular airtime, cosmetics, or other items that were repeatedly described as gifts, a finding corroborated by Hunter (2002, 2010). The materiality of heteronormative intimacy intersects with the mobilisation of long-standing notions of hegemonic masculinities to complicate the health-seeking behaviours of men in the park. One male ranger in his 20s asserted:

> 'the more powerful you are, the more women you have, but condoms can take away that power. For us, skin-to-skin, that is being a man. The more wives you have the more of a man you are. So that means also here in the park, where we don't have wives, the more women you have, the more of a man you are. You use the money you have to attract these women. You know, women are like cattle.'

Here he is mobilising longstanding notions of wealth, historically accrued in the form of cattle, to express the intersections of the materiality of everyday intimacy, understandings of masculinity, and health-related behaviours.

Another dynamic specific to life inside Kruger National Park that allowed some men to deploy particular material strategies to pursue intimate relationships has been the provision of food rations.[8] People in the lowest two pay categories in the park had their monthly incomes augmented with allowances of staple foods. This laudable park strategy was designed to ensure that those earning smaller monthly incomes had the necessary caloric intake needed for demanding jobs in the conservancy. But, these material goods were also utilised in other ways. One middle-aged senior male manager quipped:

> The Park provides A and B band [the two lowest pay scales] with dry rations, food for them to eat. But these rations--this food--has now become a draw card for men to use to attract women. Because as long as I am getting rations, women know that if they have four or five men, then at least they have five sets of rations to draw on and use. Now that means that these men end up not taking these rations home because they are giving them to their girlfriends who they are sleeping with, who then take those rations home to their families and places instead. This is destroying our families.

Praiseworthy decisions made by park management designed to ensure the health of the workforce were reworked in unintended ways that ironically contribute to emergent patterns of intimacy and possibly to ill health.

However, in the age of AIDS in South Africa, understandings of the prestige associated with the consumption of both bodies and objects to notions of masculinity are also shifting. Speaking of men who earn more than he does or attract more partners, a young male ranger put it like this:

> 'When we see someone holding a big position and earning a lot, when we look at him, he maybe spends a lot of money on very expensive cars or attracting lots of women. But when he does something like that, we look at him and say he's acting like a child.'

Masculinities, like other socially-constructed understandings, are subject to context-dependent renegotiation and redefinition.

In this era of constitutionally guaranteed gender-based rights, expressed often in South Africa through the idea of 50/50 (equal rights for men and women), women too use their new-found rights to leverage material possessions to attract partners and shape patterns of heteronormative intimacy in the park. Whereas, in the past, the ability to pursue multiple intimate relationships or very short-term consecutive ones was considered the domain of men, in the new millennium, women express their right to do likewise and use their material well-being to pursue this course of action (Hunter 2010). A middle-aged woman in a position of authority in the park, asserted:

> Older women who are staying in the park also have that perception that they have the right to be with younger men. But in order to do that, you have to buy them something, so that they come and visit. You cannot just say 'Come and visit me.' In order for them to call that gentleman, they must do something in order to bring him nearer. If these sugar mommies notice that this gentleman is very fond of liquor, they might buy some and say, 'Come, I've got something for you.' Then they give him liquor, and they start drinking, drinking, drinking. Then one thing leads to another. There are so many ways to kill a cat.'

This emergent constellation of forces related to changing political economy, understandings of gender-based rights, and intimate behaviour demonstrates that these forces are not static and are open to renegotiation. Importantly, such dynamics are not driven by conservation projects *per se* and do not occur exclusively, or even primarily, within protected areas. Indeed, Hunter (2010) details their widespread occurrence within a township setting in another province of South Africa. However, crucially, in a widespread environment of significant chronic unemployment, employment in the national park provides a steady income that does facilitate the deployment of hegemonic masculinities that influence these patterns of intimacy.

In Tanzania's north-eastern conservancies, the concentration of male workers is much higher and emergent discourses of rights-based gender equality are less widespread. The primary way in which protected areas shape patterns of intimacy through material inequality is male park employees using their salaries and attendant mobility to exit the park, head to adjacent communities, and use their relative wealth (compared to others working and living in those communities) to pursue intimate relationships. A middle-aged male protection services park employee, connected relaxation, consumption, and intimacy in the following way:

> When there is time off, many park employees use their money for drinking and relaxation. That is how he can get involved in such a thing [having sex with a woman in town]. You come down to town, have a drink, and you just get a girl. You know, men who work in national parks are using their money like this because they stay in the park for a long time. There they will spend nothing, so when they come here [Karatu], they want to spend money relaxing.

This conjunction of consumption; of food, drink, and women, was very commonly reported among interview respondents in northern Tanzania. The rise of neoliberal global capitalism has reworked understandings of intimacy and rights through a consumptive lens.

Another way in which the materiality of everyday sex in Tanzania intersected with patriarchal patterns of consumption was through the notion of consumptive disposability. Some men likened women to disposable household items that have a limited shelf life and are to be used for a while and then replaced in a metaphorical planned obsolescence of the intimate. One mid-30s male conservation manager indicated:

> 'Every woman I see in front of me that I'm interested in, I ask, "What does it take for that to happen?" Money is the answer and now, working in the park, I have enough money. If I want to possess her all I need is money and now I have my salary. Now once she is worn out and I get tired of her, I just put her aside and I go for another one.'

The consumption of women's bodies becomes a male prerogative predicted on the access to income and material goods in a patriarchal environment of hegemonic masculinities. One young female conservation worker summed up this connection by saying, 'You know, for many men, to have many women is a form of prestige, it is like if you have a nice car.' Again, this analysis is not intended to question the purpose of protected areas writ large, but to demonstrate that concrete choices made about what conversation will look like, who is involved, where they will live, and how much money they will make facilitates a social environment informed by consumptive heteronormative intimacy. In the absence of this constellation of forces, it is plausible to imagine that such temptations may not have necessarily been translated into action.

These dynamics of material inequality certainly unfold in somewhat different, yet also eerily similar ways in and around national parks in both South Africa and Tanzania. Spatial and structural forces shape patterns of intimacy through dynamics of insolation, concentration, and mobility of park workers in an environment saturated by material inequalities and particular notions of gender relations. From both a public health and a conservation management perspective, what makes these intersections all the more pressing is that they occur in the age of AIDS.

CONCLUSION: THE IMPLICATIONS OF CONSERVATION PROFESSIONALS' GEOGRAPHIES OF INTIMACY IN THE AGE OF AIDS

Male and female conservation professionals, living and working in protected areas, are isolated from their families for extended periods, live in close proximity to other protected area employees, and are generally more mobile than many other population groups. That many engage in heterosexual intimate relationships with other people living inside or adjacent to these protected areas, is not necessarily in-and-of-itself a

public health concern. However, given the human resource intensive nature of conservation, it becomes a health issue that protected areas are realising needs to be taken seriously within the context of the generalised AIDS epidemics.

As a number of conservation industry sponsored reports have documented over the last 15 years, the down-stream impacts of the epidemic in conservancies are numerous and significant. They include losses to human capacity, the loss of experience-based knowledge and practice, lost investments in training and mentoring, increased time off for unwell staff, reduced working capacity for sick staff members, and the diversion of limited conservation-related funds for HIV/AIDS-related costs, including transportation to health services and funeral costs, declines in morale, and increases in unsustainable natural resource extraction (Gelman et al. 2005; Bolton and Talman 2010; Oglethorpe et al. 2013). This in-depth qualitative research extends these insights to provide a more nuanced account of the ways that structural forces, inherent in contemporary conservation models, intersect with the ways that people makes sense of their environments and behave in those environments.

In both the academic and popular press, as well as in conversations with numerous conservation professionals in both South Africa and Tanzania, the detrimental impacts of the HIV/AIDS pandemic are most often squarely blamed on the behaviour of individuals. As one frustrated senior conservation manager in KNP quipped, 'Our business here is conservation, not forcing people to behave responsibly. We have run HIV-prevention seminars and now it is up to each and every one of them to act responsibly. What more do you want us to do?'

While no reasonable scholar or health practitioner would disavow the importance of the choices of individuals in the progression of the pandemic; in a world where 36.7 million people are living with HIV and there were 2.1 million new infections last year alone (UNAIDS 2016), we can no longer place the blame for the world's deadliest pandemic solely on the shoulders of individuals. Instead, as social scientists and public health practitioners have long been arguing, biomedical health is always embedded within socio-cultural, political-economic, and geographic contexts (for example, Barnett and Whiteside 2006).

This innovative research synthesises the insights of political ecology and conservation literature, arguing that national parks are socially produced spaces that artificially shape who lives where, who can move where, how much various people earn, what potential sexual partners people have access to, and the dynamics of the materiality of everyday sex. A middle-aged male senior conservation professional in KNP nicely summed the situation up like this:

> Our biggest problem with HIV in the park is the fact that it's sexually transmitted, and as human beings, we're all sexual creatures. If you put people into a park community, which is where we are here, which is an artificial community in a way, people's basic needs and desires haven't changed. People don't just say, 'Now that I'm in this national park, I will change the way I think or behave.' And as a result of that, you're sitting with quite a challenge. You've got men and women all living together far from their families. From that, we can draw the conclusion that there will be a certain amount of sexual interaction. If you have somebody who is HIV positive, incorporated into that environment, the ripple effect of that is quite scary. There is a high likelihood that they will be involved with somebody else here. Then they go home on leave at the end of the month or year, go back to their wives or husbands. The odds of infection being spread are quite large. In some ways, this is a consequence of how we have set things up.

Supporting such an assessment, this article concludes that, in addition to simply implementing more HIV-prevention workshops and continuing to roll-out life saving ART, conservation organisations need to examine the underlying dynamics at play in their protected areas and work to promote spaces and understandings that address these structural drivers of HIV transmission within and around their boundaries. These dynamics within protected areas are both reason for concern, but also present an important opportunity. For instance, both the South African and Tanzanian national park authorities have been increasingly rolling out AIDS-related behaviour change programmes (Reid-Hresko 2014). Although their gains appear minimal, this is an important first step and it is time to further build on this initial momentum.

If patterns of intimacy are the contingent outcome of the intersections of multiple forces, these contingencies can be reworked and, indeed, KNP management is already pursuing a handful of these strategies, including working with the NGO Sonke Gender Justice, which seeks to intervene into the processes and understandings that shape masculinity, intimate behaviour, and alcohol use.

Additionally, interviews with park managers in both countries made clear that management is committed to the widespread roll-out of ART; trying to provide sufficient and adequate housing for families to accompany essential staff workers and for spouses to receive work assignments that allow them to cohabitate while working; to bus employees who live on the boundary of the park in and out every day so they can stay with their families; even thinking about exactly which essential services staff need to be living inside the parks; and moving those who do not, to housing developments adjacent to the main gates. The long-term impacts of these changes have yet to be determined.

When conservation organisations take seriously the effect their socially constructed and arbitrary decisions have on shaping the lives of park employees; which in turn shape the successes or failures of various conservation initiatives, there is a real opportunity to think about how to do them differently. Nothing is pre-determined or essential about how these structures are established and implemented. What has been done can always be done differently. The business of conservation is the protection of flora, fauna, and landscapes.

But without healthy and productive parks staff who are supported by spaces and structures that promote positive intimate decisions and work to lessen the inequalities that are barriers to such healthy relationships; the already challenging endeavor is made all the more daunting.

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NOTES

1. All names have been changed to protect the confidentiality of research participants.
2. This is not to suggest that all of Kruger's black employees live in the living quarters, as that is not the case. A significant number, primarily those in management positions, live in the bucolic staff village on the other side of Skukuza. But only black employees live in the living quarters.
3. In the past several years, the Kruger National Park management has undertaken the laudable task of beginning to replace staff living quarters with collections of small two room flats, which have their own kitchens and bathrooms. While their progress has been understandably slow, it is also steady. However, such renovations have not yet replaced all of the Skukuza living quarters and are not expected to do so for years to come. Furthermore, as a result of other research affiliated with this project and the suggestions of some senior park management, KNP bureaucrats instituted a bus system, which transports Skukuza workers who live close to the boundaries of the park in and out of the park to Mkhulu on a daily basis so that they can stay at home with their families. These employees are given a modest monthly housing stipend, rather than accommodations in the living quarters. Both of these initiatives must be seen as positive steps towards alleviating some of the structural forces central to this argument.
4. Because of the geographic and population diversity present in Kruger National Park, this article focusses only on those employees who live in the Skukuza Rest Camp living quarters. This is not to suggest that these dynamics are exactly the same across the wide spaces and heterogeneous work force of the entire park.
5. Tanzania's northern safari circuit and South Africa's Kruger National Park were chosen for comparative work because they are the two most prestigious large protected areas on the continent, receiving large numbers of annual visitors and generating significant revenues.
6. While exact employment numbers are unavailable for Tanzania's northern protected areas, roughly 32% of Kruger National Park's employees are women. However, they are largely concentrated in hospitality service provision and office work.
7. This research was approved by the University of Colorado's Internal Review Board (protocol 0309.16), Quest University Canada's Research Ethics Board (protocols 2013-0901 and 2015-0803), the Tanzanian Commission for Science and Technology, all relevant local Tanzanian officials, and South African National Parks (protocol REHRJ1164).
8. Park management is currently revising the rations programme and will be replacing it with a cash payment program, with which employees can purchase food provisions of their choosing or use the money in other ways, as they see fit. While this provides employees with greater agency and lessens the paternalism of the rations programme, it is unclear what the implications for intimate behaviour and sexual health may be.

REFERENCES

Adams, W. and J. Hutton. 2007. People, parks and poverty: political ecology and biodiversity conservation. *Conservation & Society* 5(2):147-183.

Agrawal, A. and K. Redford. 2009. Conservation and displacement: an overview. *Conservation & Society* 7(1):1-10.

Anthony, B., P. Scott, and A. Antypas. 2010. Sitting on the fence? Policies and practices in managing human-wildlife conflict in Limpopo province, South Africa. *Conservation & Society* 8(3):225-240.

Barnett, T. and A. Whiteside. 2006. *AIDS in the twenty-first century: disease and globalization*. New York: Palgrave Macmillan.

Beirsack, A. and J. Greenberg (eds.). 2006. *Reimagining political ecology.* Durham, NC: Duke University Press.

Bolton, S. and A. Talman. 2010. *Interactions between HIV/AIDS and the environment: a review of evidence and recommendations for next steps.* Nairobi, Kenya: International Union for Conservation of Nature.

Brockington, D. 2002. *Fortress conservation: the preservation of the Mkomazi game reserve.* Bloomington, IN: Indiana University Press.

Buscher, B. 2013. *Transforming the frontier: peace parks and the politics of neoliberal conservation in southern Africa.* Durham, NC: Duke University Press.

Campbell, C. 2004. Migrancy, masculine identities, and AIDS: the psychosocial context of HIV transmission on the South African gold mines. In: *HIV & AIDS in Africa: beyond epidemiology* (eds. Kalipeni, E., Craddock, S., Oppong, and J. Ghosh). Malden, MA: Blackwell Publishing.

Carstens, P. 2001. *In the company of diamonds: De Beers, Kelinzee, and the control of a town.* Athens, OH: Ohio University Press.

DeMotts, R. 2008. Mitigating an elephantine epidemic: gendered space for HIV/AIDS outreach through Namibian conservancies. *Population and Environment* 29(3):186-203.

De Souza, R., G. Heinrich, S. Senefeld, K. Coon, P. Sebanja, J. Ogden, D. Mauambeta, D. N. Gelman, and J. Oglethorpe. 2008. Using innovation to address HIV, AIDS, and environment links: intervention case studies from Zimbabwe, Uganda, and Malawi. *Population and Environment* 29(3):219-246.

Emerson. R., R. Fretz, and L. Shaw. 2011. *Writing Ethnographic Fieldnotes.* 2nd edition. Chicago, IL: University of Chicago Press.

Garland, E. 2008. The elephant in the room: confronting the colonial character of wildlife conservation in Africa. *African Studies Review* 51(3): 51-74.

Garland, E. 2006. State of nature: colonial power, neoliberal capital, and wildlife management in Tanzania.' Ph.D. thesis. University of Chicago, Chicago, USA.

Gelman, N., J. Oglethorpe, and D. Mauambeta. 2005. The impact of HIV/AIDS: how it can be anticipated and managed.' *Parks* 15(1):15-34.

Goldman, M. 2011. Strangers in their own land: Maasai and wildlife conservation in northern Tanzania. *Conservation & Society* 9(1):65-79.

Goldman, M. 2003. Partitioned nature, privileged knowledge: community-based conservation in Tanzania. *Development and Change* 34(5):833-862.

Haenn, N. 2016. The middle-class conservationist: social dramas, blurred identity boundaries, and their environmental consequences in Mexican conservation.' *Current Anthropology* 57 (2):197-218.

Haenn, N. 2005. *Field of power, forests of discontent*. Tucson, AZ: University of Arizona Press.

Hulme, D. and M. Murphree. 1999. Communities, wildlife and the 'new conservation' in Africa. *Journal of International Development* 11(2):277-285.

Hunter, L., R. De Souza, and W. Twine. 2008. The environmental dimensions of the HIV/AIDS pandemic: a call for scholarship and evidence-based intervention. *Population and Environment* 29(3):103-107.

Hunter. M. 2010. *Love in the time of AIDS: inequality, gender, and rights in South Africa.* Bloomington, IN: Indiana University Press.

Hunter, M. 2007. The changing political economy of sex in South Africa: the significance of unemployment and inequalities to the scale of the AIDS pandemic.' *Social Science & Medicine* 64(3):689-700.

Hunter, M. 2002. The materiality of everyday sex: thinking beyond 'prostitution.' *African Studies* 61(1):99-120.

Hutton, J., W. Adams, and J. Murombedzi. 2005. Back to the barriers? changing narratives in biodiversity conservation. *Forum for Development Studies* 32(2):341-370.

Igoe, J. 2006. Measuring the costs and benefits of conservation to local communities. *Journal of Ecological Anthropology* 10(1):72-77.

Igoe, J. 2004. *Conservation and globalization: a study of national parks and indigenous communities from east Africa to South Dakota.* Stamford, CT: Thomson Wadsworth.

King, B. 2010. Political Ecologies of Health. *Progress in Human Geography* 34(1):38-55.

McCabe, T., P. Leslie, and L. DeLuca. 2010. Adopting cultivation to remain pastoralists: the diversification of Maasai livelihoods in northern Tanzania.' *Human Ecology* 38:321-334.

Meskell, L. 2005. Archaeological ethnography: conversations around Kruger national park. *Archaeologies* 1(1):81-100.

Needle, R., K. Kroeger, H. Belani, A. Achrekar, C. Parry, C., and S. Dewing. 2008. Sex, drugs, and HIV: rapid assessment of HIV risk behaviours among street-based drug using sex workers in Durban, South Africa. *Social Science & Medicine* 67(9):1447-1455.

Neumann, R. 1998. *Imposing wilderness: struggles over livelihoods and nature preservation in Africa.* Berkeley, CA: University of California Press.

Neves, K. and J. Igoe. 2012. Uneven development and accumulation by dispossession in nature conservation: comparing recent trends in the Azores and Tanzania. *Journal of Economic and Social Geography* 103(2):164-179.

Oglethorpe, J., T. Lukas, N. Gelman, K. Westerman, and J. Zelothe. 2013. *HIV/AIDS and environment: a manual for conservation organisations on impacts and responses*. World Wildlife Fund US and Africa Biodiversity Collaborative Group. http://www.abcg.org/document_details?document_id=598. Accessed on April 18, 2017.

Oglethorpe, J. and D. Mauambeta. 2008. Addressing AIDS through conservation in Africa.' In: *State of the wild 2008-2009: a global portrait of wildlife, wildlands, and oceans*. Washington DC: Island Press.

Penrod, J., D. Preston, R. Cain. and M. Starks. 2003. A discussion of chain referral as a method of sampling hard-to-reach populations. *Journal of Transcultural Nursing* 14(2):100-107.

Pope, C., S. Ziebland, and N. Mays. 2000. Qualitative research in health care: analysing qualitative data. *British Medical Journal* 320(7227):114-116.

Orner, P. 2006. Psychosocial impacts on caregivers of people living with AIDS. *AIDS Care* 18(3):236-240.

Ramphele, M. 1993. *A bed called home: life in the migrant labour hostels of Cape Town.* Cape Town: David Philip Publishers.

Reid-Hresko, J. 2014. Our bodies are our own: resistance to ABC-based HIV-prevention programmes in northern Tanzanian conservation organizations. *Culture, Health, & Sexuality* 16(7):765-779.

Roura, M., M. Urassa, J. Busza, D. Mbata, A. Wringe, and B. Zaba. 2009. Scaling up stigma? The effects of antiretroviral rollout on stigma and HIV testing. Early evidence from rural Tanzania.' *Sexually Transmitted Infections* 85:308-312.

Siura, H. 2006. Nature above people: Rolston and 'fortress' conservation in the south. *Ethics and Environment* 11(1):71-96.

Sodikoff, G. 2012. *Forest and labor in Madagascar: from colonial concession to global biosphere.* Bloomington, IN: Indiana University Press.

Sodikoff, G. 2007. An exceptional state: a micro-history of 'people versus park' in Madagascar. *Journal of Political Ecology* 14:10-33.

Stoller, A. (ed). 2006. *Haunted by empire: geographies of intimacy in North American history.* Durham, NC: Duke University Press.

Thomas, D. 2006. A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation* 27(2):237-246.

Timko, J., R. Kozak, and J. Innes. 2010. HIV/AIDS and forests in sub-Saharan Africa: exploring the links between morbidity, mortality, and dependence on biodiversity. *Biodiversity* 11(1):45-48.

Torell, E., J. Tobey, M. Thaxton, B. Crawford, B. Kalangahe, N. Madulu, A. Issa, V. Makota, and R. Sallema. 2006. Examining the linkages between AIDS and biodiversity conservation in coastal Tanzania.' *Ocean & Coastal Management* 49:792-811.

UNAIDS. 2016. *UNAIDS Fact Sheet: 2016 Statistics.* Geneva, Switzerland: UNAIDS. http://www.unaids.org/en/resources/fact-sheet. Accessed on March 16, 2017.

Walley, C. 2004. *Rough waters: nature and development in an east African marine park.* Princeton, NJ: Princeton University Press.

West, P., J. Igoe, and D. Brockington. 2006. Parks and peoples: the social impact of protected areas. *Annual Review of Anthropology* 35:14.1-14.27.

White, L. 1993. *The comforts of home: prostitution in colonial Nairobi.* Chicago: University of Chicago Press.

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